Diamond Alkali Co.
NJD980528996
8.1.2
Passaic Valley Sewerage Commissioners

Passaic Valley Sewerage Commissioners
Response to Request for Information
USEPA, Region 2

Item No. 9
PVSC Monitoring Report/1993

Document order #28

MONITORING REPORT – TRANSMITTAL SHEET

NJPDES NO.	REPORTING PERIOD MO. YR.	REPORTING PERIOD MO. YR.
0 0 2 1 0 1 6	0 1 9 3	THRU 0 1 9 3

PERMITTEE: Name Passaic Valley Sewerage Commissioners

Address 600 Wilson Avenue

Newark, New Jersey 07105

FACILITY: Name Passaic Valley Sewerage Commissioners

Address 600 Wilson Avenue

Newark, N.J. 07105 (County) Essex

Telephone (201) 344-1800

* For reporting period 1/93
** For reporting period 12/92

FORMS ATTACHED *(Indicate Quantity of Each)*

SLUDGE REPORTS - SANITARY

[1]* T-VWX-007 [1]** T-VWX-008 [1]* T-VWX-009

SLUDGE REPORTS - INDUSTRIAL

[ ] T-VWX-010A [ ] T-VWX-010B

WASTEWATER REPORTS

[ ] T-VWX-011 [ ] T-VWX-012 [ ] T-VWX-013

GROUNDWATER REPORTS

[ ] VWX-015(A,B) [ ] VWX-016 [ ] VWX-017

NPDES DISCHARGE MONITORING REPORT

[ ] EPA FORM 3320-1

OPERATING EXCEPTIONS

	YES	NO
DYE TESTING	☐	☐
TEMPORARY BYPASSING	☐	☐
DISINFECTION INTERRUPTION	☐	☐
MONITORING MALFUNCTIONS	☐	☐
UNITS OUT OF OPERATION	☐	☐
OTHER	☐	☐

(Detail any "Yes" on reverse side in appropriate space.)

NOTE: *The "Hours Attended at Plant" on the reverse of this sheet must also be completed.*

AUTHENTICATION - I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

LICENSED OPERATOR

Name *(Printed)* Phil Habrukowich

Grade & Registry No. NJ S-4 #3972

Signature Phil Habrukowich

Date 2/24/93

PRINCIPAL EXECUTIVE OFFICER or DULY AUTHORIZED REPRESENTATIVE

Name *(Printed)* Carmine T. Perrapato

Title *(Printed)* Executive Director

Signature Carmine T. Perrapato

Date 3/25/93

946430002

Passaic Valley
Sewerage Commissioners

600 WILSON AVENUE
NEWARK, N.J. 07105
(201) 344-1800
Fax: (201) 344-2951

This domestic wastewater sludge report represents dewatered cake which has been centrifuged and lime stabilized.

946430003

T-WX-007
5/89

New Jersey Department of Environmental Protection
Division of Water Resources

DOMESTIC WASTEWATER SLUDGE REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY		
0021016	01	1993	5	1	Page 2 of 2

FACILITY NAME: Passaic Valley Sewerage Commissioners

A. REPORTING CATEGORY INFORMATION

1. Permitted Wastewater Flow	(MGD)	A1:	33.00
2. Industrial Contribution	(% of influent)	A2:	18.
3. Average Daily Septage Treated	(Gallons/Day)	A3:	22588

B. INFORMATION ON SLUDGE PRODUCED IN TREATMENT PROCESS

1. Average Total Solids of Sludge	(% by weight)	B1:	4.50
2. Average Daily Sludge Production	(Gallons/Day)	B2:	391993
3. Average Daily Sludge Production	(Dry Tons/Day	B3:	735.4

**C. INFORMATION ON SLUDGE REMOVED FOR ULTIMATE

1. Complete ONLY If Liquid Sludge Is Removed			
a. Total Solids of Liquid Sludge	(% by weight)	C1:	
b. Average Daily Sludge Removal	(Gallons/Day	C2:	
2. Complete ONLY If Dewatered Sludge Is Removed			
a. Total Solids of Dewatered Sludge	(% by weight)	C3:	4.50
b. Complete ONE of the following:			
i. Average Daily Sludge Removal	(Gallons/Day)	C4:	
Total Solids of 2.b.i.	(% by weight)	C5:	
ii. Average Daily Sludge Removal	(Wet Cu. Yds/Day)	C6:	
iii. Average Daily Sludge Removal	(Wet Tons/Day)	C7:	163.3
3. Total Average Daily Sludge Removal	(Dry Tons/Day)	C8:	735.4
4. pH of Sludge Removed	(Standard Units)	C9:	10.9

D. ULTIMATE SLUDGE MANAGEMENT SITE (See Codes on Reverse)

METHOD CODE	HAULER REGISTRY	FACILITY/OPERATION	PERMIT NO.
5	17244	OUT OF STATE	

E. PATHOGEN REDUCTION INFORMATION (See Codes and Complete Reverse)

METHOD CODE	FACILITY/OPERATION	PERMIT NO.	FOR DEP USE ONLY PSRP	FOR DEP USE ONLY PFRP
D	PASSAIC VALLEY	0021016		

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli	Chief Chemist		FEB 25, 1993
Name of Authorized Agent (Print)	Title	Signature	Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07250

946430004

PATHOGEN REDUCTION METHOD CODE (Appropriate sections must be completed)

A. Anaerobic Digestion; or

B. Aerobic Digestion; complete the following:

		UNIT 1	UNIT 2	UNIT 3
1. Percent Volatile Solids:				
a. Before Stabilization	(as weight % of TS)			
b. After Stabilization	(as weight % of TS)			
c. Percent Reduction	(see equation)			
2. Detention Time	(Days)			
3. Average Temperature	(Degrees C)			

C. Air Drying (Report on any beds emptied for the report period)

BED	DATE SLUDGE LOADED Month	Day	Year	DEPTH POURED Inches	DATE SLUDGE REMOVED Month	Day	Year
1.							
2.							
3.							
4.							
5.							

D. State Approved Lime Stabilization
E. Thermal Treatment/Drying
F. Phragmites
G. Composting
H. Other (specify here: _____)
I. None

ULTIMATE SLUDGE MANAGEMENT METHOD CODE

1. Land Application at a NJPDES Permitted Site
2. State Approved Distribution Permit
3. Incineration
4. Ocean Disposal
5. Out of State
6. Residual Not Classified as Sludge, Managed by Hazardous or Waste Flow Regs.
7. Other (specify here: _____)
8. None Removed

EQUATIONS

A. $\text{Dry Tons} = \frac{\text{Gallons (wet) X Solid Content (of the gallons)}}{240}$

B. $\text{Dry Tons} = \frac{\text{Cubic Yards (wet) X Solid Content (of the cubic yards)}}{(Y)}$

y = 1.185 where solid content is less than 15%
= 1.265 where solid content is 16% to 23%
= 1.58 where solid content is 24% to 29%
= 1.9 where solid content is greater than 30%

C. Dry Tons = Tons (wet) X Solid Content (of the wet tons)

D. $\text{Volatile Solids Reduction} = \frac{\text{VS before X VS after}}{\text{VX before— (VS before X VS after)}} \times 100$

NOTE: The total and volatile solid contents in the above equations must be expressed as a decimal, for example:

1% Total Solids = .01
20% Total Solids = .20

Alternative equations may be utilized if approved in writing by NJDEP.

946430005

New Jersey Department of Environmental Protection
Division of Water Resources

METALS AND SELECTED CHEMICAL PARAMETERS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY
0 0 2 1 0 1 6	1 2	1 9 9 2	5 2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Centrifuged (Lime Stabilized) Sludge

PARAMETER	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Metals			
Arsenic	01002	359	
Beryllium	01012	047	*
Cadmium	61527	141	
Chromium	61512	1715	
Copper	61506	3278	
Iron	01045	3260	
Lead	61503	310	
Mercury	01260	121	
Molybdenum	01062	190	
Nickel	61515	4080	
Selenium	61518	074	
Zinc	61509	880	
Selected Chemical			
Total Nitrogen	00625	21608	
Ammonia Nitrogen	71845	746	
Nitrate Nitrogen	71850	22	*
Oil and Grease	00550	41475	
Phenols	46000	577	
Phosphorus	00665	3360	
Calcium	00916	156375	
Magnesium	00927	2387	
Potassium	00937	1375	
Cyanide	00720	1782	
Fluoride	00951	274	
Chloride	00940	1780	

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli — Name of Authorized Agent (Print)
Chief Chemist — Title
Signature
FEB 23, 1993 — Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07407

946430006

New Jersey Department of Environmental Protection
Division of Water Resources

TOXIC ORGANIC COMPOUNDS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY
0021016	01	1993	52

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Centrifuged (Lime Stabilized) Sludge

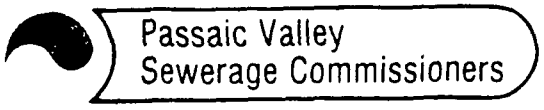
PARAMETER	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Pesticides and			
Aldrin	39330	0.0100	*
Chlordane	39350	0.0100	*
Dieldrin	39380	0.0100	*
DDT	39370	0.0250	*
Heptachlor	39410	0.0050	*
Lindane	39782	0.0050	*
PCB's	39516	0.0500	*
Toxaphene	39400	0.0100	*
Purgeables			
Benzene	34030	0.0483	*
Carbon tetrachloride	32102	0.0483	*
Chloroform	32106	0.0483	*
Methylene Chloride	34423	0.0483	*
Tetrachloroethylene	34475	0.0609	
Trichloroethylene	39180	0.0483	*
Vinyl chloride	39175	0.0966	*
Base/Neutrals and Acids			
Benzidine	39120	1.52	*
Benzo(a)pyrene	34247	0.0304	*
Bis(2-ethylhexyl) phthalate	39100	3.24	
Hexachlorobenzene	39700	0.0304	*
Hexachlorobutadiene	39702	0.0304	*
N-nitrosodimethylamine	34438	0.0608	*

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli — Name of Authorized Agent (Print)
Chief Chemist, PVSC — Title
[signature] — Signature
Feb. 5, 1993 — Date

Laboratory Name: Priority One Testing Laboratory
Cert No. 09399

946430007



600 WILSON AVENUE
NEWARK, N.J. 07105
(201) 344-1800
Fax: (201) 344-2951

This domestic wastewater sludge report represents dewatered cake which originated from our Zimpro process.

946430008

T-WX-007
5/89

New Jersey Department of Environmental Protection
Division of Water Resources

DOMESTIC WASTEWATER SLUDGE REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY		
0021016	01	1993	5	1	Page 1 of 2

FACILITY NAME: Passaic Valley Sewerage Commissioners

A. REPORTING CATEGORY INFORMATION

1. Permitted Wastewater Flow	(MGD)	A1:	330.0
2. Industrial Conribution	(% of influent)	A2:	18
3. Average Daily Septage Treated	(Gallons/Day)	A3:	2258

B. INFORMATION ON SLUDGE PRODUCED IN TREATMENT

1. Average Total Solids of Sludge	(% by weight)	B1:	55.0
2. Average Daily Sludge Production	(Gallons/Day)	B2:	466641
3. Average Daily Sludge Production	(Dry Tons/Day	B3:	1069.8

**C. INFORMATION ON SLUDGE REMOVED FOR ULTIMATE

1. Complete ONLY If Liquid Sludge Is Removed			
a. Total Solids of Liquid Sludge	(% by weight)	C1:	
b. Average Daily Sludge Removal	(Gallons/Day	C2:	
2. Complete ONLY If Dewatered Sludge Is Removed			
a. Total Solids of Dewatered Sludge	(% by weight)	C3:	55.0
b. Complete ONE of the following:			
i. Average Daily Sludge Removal	(Gallons/Day)	C4:	
Total Solids of 2.b.i.	(% by weight)	C5:	
ii. Average Daily Sludge Removal	(Wet Cu. Yds/Day)	C6:	
iii. Average Daily Sludge Removal	(Wet Tons/Day)	C7:	194.3
3. Total Average Daily Sludge Removal	(Dry Tons/Day)	C8:	1069.8
4. pH of Sludge Removed	(Standard Units)	C9:	5.0

D. ULTIMATE SLUDGE MANAGEMENT SITE (See Codes on Reverse)

METHOD CODE	HAULER REGISTRY	FACILITY/OPERATION	PERMIT NO.
5	17244	OUT OF STATE	

E. PATHOGEN REDUCTION INFORMATION (See Codes and Complete Reverse)

METHOD CODE	FACILITY/OPERATION	PERMIT NO.	FOR DEP USE ONLY PSRP	FOR DEP USE ONLY PFRP
E	PASSAIC VALLEY	0021016		

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli — Name of Authorized Agent (Print)
Chief Chemist — Title
Signature
FEB 25, 1993 — Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07250

946430009

PATHOGEN REDUCTION METHOD CODE (Appropriate sections must be completed)

A. Anaerobic Digestion; or

B. Aerobic Digestion; complete the following:

		UNIT 1	UNIT 2	UNIT 3
1. Percent Volatile Solids:				
a. Before Stabilization	(as weight % of TS)	___._	__._	__._
b. After Stabilization	(as weight % of TS)	__._	__._	__._
c. Percent Reduction	(see equation)	__._	__._	__._
2. Detention Time	(Days)	___	___	___
3. Average Temperature	(Degrees C)	__._	__._	__._

C. Air Drying (Report on any beds emptied for the report period)

BED	DATE SLUDGE LOADED Month	Day	Year	DEPTH POURED Inches	DATE SLUDGE REMOVED Month	Day	Year
1.	__	__	____	__	__	__	____
2.	__	__	____	__	__	__	____
3.	__	__	____	__	__	__	____
4.	__	__	____	__	__	__	____
5.	__	__	____	__	__	__	____

D. *State Approved Lime Stabilization*
E. Thermal Treatment/Drying
F. Phragmites
G. Composting
H. Other (specify here: _____)
I. None

ULTIMATE SLUDGE MANAGEMENT METHOD CODE

1. Land Application at a NJPDES Permitted Site
2. State Approved Distribution Permit
3. Incineration
4. Ocean Disposal
5. Out of State
6. Residual Not Classified as Sludge, Managed by Hazardous or Waste Flow Regs.
7. Other (specify here: _____)
8. None Removed

EQUATIONS

A. $\text{Dry Tons} = \frac{\text{Gallons (wet) X Solid Content (of the gallons)}}{240}$

B. $\text{Dry Tons} = \frac{\text{Cubic Yards (wet) X Solid Content (of the cubic yards)}}{(Y)}$

y = 1.185 where solid content is less than 15%
= 1.265 where solid content is 16% to 23%
= 1.58 where solid content is 24% to 29%
= 1.9 where solid content is greater than 30%

C. Dry Tons = Tons (wet) X Solid Content (of the wet tons)

D. $\text{Volatile Solids Reduction} = \frac{\text{VS before X VS after}}{\text{VX before— (VS before X VS after)}} \times 100$

NOTE: The total and volatile solid contents in the above equations must be expressed as a decimal, for example:

1% Total Solids = .01
20% Total Solids = .20

Alternative equations may be utilized if approved in writing by NJDEP.

946430010

New Jersey Department of Environmental Protection
Division of Water Resources

METALS AND SELECTED CHEMICAL PARAMETERS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY
0 0 2 1 0 1 6	1 2	1 9 9 2	5 2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Filter Press (Wet Air Oxidized) Sludge)

PARAMETER	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Metals			
Arsenic	01002	4 0 4	
Beryllium	01012	1 3 2	*
Cadmium	61527	3 3 3 5	
Chromium	61512	5 0 0 3 0	
Copper	61506	1 0 3 9 1	
Iron	01045	1 0 1 4 0	
Lead	61503	7 7 9	
Mercury	01260	1 8 4	
Molybdenum	01062	1 5 9	
Nickel	61515	8 6 5 5	
Selenium	61518	2 9 1	
Zinc	61509	2 5 7 1	
Selected Chemical			
Total Nitrogen	00625	1 4 6 0 1	
Ammonia Nitrogen	71845	9 3 0	
Nitrate Nitrogen	71850	1 8	*
Oil and Grease	00550	1 3 7 3 6 3	
Phenols	46000	7 4 8	
Phosphorus	00665	1 3 3 0 0	
Calcium	00916	1 4 8 8 5	
Magnesium	00927	2 7 0 7	
Potassium	00937	1 0 4 0	
Cyanide	00720	4 3 5	
Fluoride	00951	9 1 0	
Chloride	00940	7 1 9	

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli — Name of Authorized Agent (Print)
Chief Chemist — Title
Signature
FEB 23,1993 — Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07407

946430011

T-WX-009
5/89

New Jersey Department of Environmental Protection
Division of Water Resources

TOXIC ORGANIC COMPOUNDS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY
0021016	01	1993	52

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Filter Pressed (Wet Air Oxidized) Sludge

PARAMETER	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Pesticides and			
Aldrin	39330	0.0100	*
Chlordane	39350	0.0100	*
Dieldrin	39380	0.0100	*
DDT	39370	0.0250	*
Heptachlor	39410	0.0050	*
Lindane	39782	0.0050	*
PCB's	39516	0.0500	*
Toxaphene	39400	1.00	*
Purgeables			
Benzene	34030	0.0164	
Carbon tetrachloride	32102	0.0041	*
Chloroform	32106	0.0041	*
Methylene Chloride	34423	0.0041	*
Tetrachloroethylene	34475	0.0257	
Trichloroethylene	39180	0.0041	*
Vinyl chloride	39175	0.0082	*
Base/Neutrals and Acids			
Benzidine	39120	451.	*
Benzo(a)pyrene	34247	903.	*
Bis(2-ethylhexyl) phthalate	39100	142.	
Hexachlorobenzene	39700	903.	*
Hexachlorobutadiene	39702	903.	*
N-nitrosodimethylamine	34438	181.	*

CERTIFICATE OF AUTHENTICITY

Name of Authorized Agent (Print)	Title	Signature	Date
Arthur A. Martinelli	Chief Chemist, PVSC	Arthur A. Martinelli	Feb. 5, 1993

Laboratory Name: Priority One Testing Laboratory

Cert No. 09399

946430012

MONITORING REPORT – TRANSMITTAL SHEET

NJPDES NO.	REPORTING PERIOD MO. YR.		MO. YR.
0 0 2 1 0 1 6	0 2 9 3	THRU	0 2 9 3

PERMITTEE:

Name: Passaic Valley Sewerage Commissioners

Address: 600 Wilson Avenue

Newark, New Jersey 07105

FACILITY:

Name: Passaic Valley Sewerage Commissioners

Address: 600 Wilson Avenue

Newark, N.J. 07105 (County) Essex

Telephone (201) 344-1800

* – For reporting period 2/93
** – For reporting period 1/93

FORMS ATTACHED *(Indicate Quantity of Each)*

SLUDGE REPORTS - SANITARY

[1]* T-VWX-007 [1]** T-VWX-008 [1]* T-VWX-009

SLUDGE REPORTS - INDUSTRIAL

[ ] T-VWX-010A [ ] T-VWX-010B

WASTEWATER REPORTS

[ ] T-VWX-011 [ ] T-VWX-012 [ ] T-VWX-013

GROUNDWATER REPORTS

[ ] VWX-015(A,B) [ ] VWX-016 [ ] VWX-017

NPDES DISCHARGE MONITORING REPORT

[ ] EPA FORM 3320-1

OPERATING EXCEPTIONS

	YES	NO
DYE TESTING	☐	☐
TEMPORARY BYPASSING	☐	☐
DISINFECTION INTERRUPTION	☐	☐
MONITORING MALFUNCTIONS	☐	☐
UNITS OUT OF OPERATION	☐	☐
OTHER	☐	☐

(Detail any "Yes" on reverse side in appropriate space.)

NOTE: ***The "Hours Attended at Plant" on the reverse of this sheet must also be completed.***

AUTHENTICATION - I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

LICENSED OPERATOR

Name *(Printed)* Phil Habrukowich

Grade & Registry No. NJ S-4 #3972

Signature [signature]

Date 3/25/93

PRINCIPAL EXECUTIVE OFFICER or DULY AUTHORIZED REPRESENTATIVE

Name *(Printed)* Carmine T. Perrapato

Title *(Printed)* Executive Director

Signature [signature]

Date 3/25/93

946430013

Passaic Valley
Sewerage Commissioners

600 WILSON AVENUE
NEWARK, N.J. 07105
(201) 344-1800
Fax: (201) 344-2951

This domestic wastewater sludge report represents dewatered cake which originated from our Zimpro process.

946430014

T-VWX-007
5/89

New Jersey Department of Environmental Protection
Division of Water Resources

DOMESTIC WASTEWATER SLUDGE REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY		
0 0 2 1 0 1 6	0 2	1 9 9 3	5	1	Page 1 of 2

FACILITY NAME: Passaic Valley Sewerage Commissioners

A. REPORTING CATEGORY INFORMATION

1. Permitted Wastewater Flow	(MGD)	A1:	330.0
2. Industrial Conribution	(% of influent)	A2:	18.
3. Average Daily Septage Treated	(Gallons/Day)	A3:	1714

B. INFORMATION ON SLUDGE PRODUCED IN TREATMENT PROCESS

1. Average Total Solids of Sludge	(% by weight)	B1:	5.42
2. Average Daily Sludge Production	(Gallons/Day)	B2:	56743.
3. Average Daily Sludge Production	(Dry Tons/Day	B3:	1282.0

**C. INFORMATION ON SLUDGE REMOVED FOR ULTIMATE MANAGEMENT

1. Complete ONLY If Liquid Sludge Is Removed			
a. Total Solids of Liquid Sludge	(% by weight)	C1:	.
b. Average Daily Sludge Removal	(Gallons/Day	C2:	.
2. Complete ONLY If Dewatered Sludge Is Removed			
a. Total Solids of Dewatered Sludge	(% by weight)	C3:	5.42
b. Complete ONE of the following:			
i. Average Daily Sludge Removal	(Gallons/Day)	C4:	.
Total Solids of 2.b.i.	(% by weight)	C5:	.
ii. Average Daily Sludge Removal	(Wet Cu. Yds/Day)	C6:	.
iii. Average Daily Sludge Removal	(Wet Tons/Day)	C7:	236.4
3. Total Average Daily Sludge Removal	(Dry Tons/Day)	C8:	1282.0
4. pH of Sludge Removed	(Standard Units)	C9:	5.6

D. ULTIMATE SLUDGE MANAGEMENT SITE (See Codes on Reverse)

METHOD CODE	HAULER REGISTRY	FACILITY/OPERATION	PERMIT NO.
5	17244	OUT OF STATE	

E. PATHOGEN REDUCTION INFORMATION (See Codes and Complete Reverse)

METHOD CODE	FACILITY/OPERATION	PERMIT NO.	FOR DEP USE ONLY PSRP	FOR DEP USE ONLY PFRP
E	PASSAIC VALLEY	0021016		

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli	Chief Chemist		Mar. 19, 1993
Name of Authorized Agent (Print)	Title	Signature	Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07250

946430015

PATHOGEN REDUCTION METHOD CODE (Appropriate sections must be completed)

A. Anaerobic Digestion; or

B. Aerobic Digestion; complete the following:

		UNIT 1	UNIT 2	UNIT 3
1. Percent Volatile Solids:				
a. Before Stabilization	(as weight % of TS)			
b. After Stabilization	(as weight % of TS)			
c. Percent Reduction	(see equation)			
2. Detention Time	(Days)			
3. Average Temperature	(Degrees C)			

C. Air Drying (Report on any beds emptied for the report period)

BED	DATE SLUDGE LOADED Month	Day	Year	DEPTH POURED Inches	DATE SLUDGE REMOVED Month	Day	Year
1.							
2.							
3.							
4.							
5.							

D. State Approved Lime Stabilization
E. Thermal Treatment/Drying
F. Phragmites
G. Composting
H. Other (specify here: _____)
I. None

ULTIMATE SLUDGE MANAGEMENT METHOD CODE

1. Land Application at a NJPDES Permitted Site
2. State Approved Distribution Permit
3. Incineration
4. Ocean Disposal
5. Out of State
6. Residual Not Classified as Sludge, Managed by Hazardous or Waste Flow Regs.
7. Other (specify here: _____)
8. None Removed

EQUATIONS

A. Dry Tons = $\frac{\text{Gallons (wet) X Solid Content (of the gallons)}}{240}$

B. Dry Tons = $\frac{\text{Cubic Yards (wet) X Solid Content (of the cubic yards)}}{(Y)}$

y = 1.185 where solid content is less than 15%
= 1.265 where solid content is 16% to 23%
= 1.58 where solid content is 24% to 29%
= 1.9 where solid content is greater than 30%

C. Dry Tons = Tons (wet) X Solid Content (of the wet tons)

D. Volatile Solids Reduction = $\frac{\text{VS before X VS after}}{\text{VX before} - (\text{VS before X VS after})}$ X 100

NOTE: The total and volatile solid contents in the above equations must be expressed as a decimal, for example:

1% Total Solids = .01
20% Total Solids = .20

Alternative equations may be utilized if approved in writing by NJDEP.

946430016

New Jersey Department of Environmental Protection
Division of Water Resources

METALS AND SELECTED CHEMICAL PARAMETERS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY
0 0 2 1 0 1 6	0 1	1 9 9 3	5 2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Filter Press (Wet Air Oxidized) Sludge)

PARAMETER	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Metals			
Arsenic	01002	232	
Beryllium	01012	115	*
Cadmium	61527	2255	
Chromium	61512	4985 5	
Copper	61506	9428 5	
Iron	01045	9830	
Lead	61503	4305	
Mercury	01260	191	
Molybdenum	01062	185	
Nickel	61515	698	
Selenium	61518	329	
Zinc	61509	1310	
Selected Chemical			
Total Nitrogen	00625	16636	
Ammonia Nitrogen	71845	1063	
Nitrate Nitrogen	71850	18	*
Oil and Grease	00550	13818 2	
Phenols	46000	675	
Phosphorus	00665	1112 0	
Calcium	00916	16355	
Magnesium	00927	2630	
Potassium	00937	895	
Cyanide	00720	327	
Fluoride	00951	118	
Chloride	00940	178	

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli	Chief Chemist		Mar 23, 1993
Name of Authorized Agent (Print)	Title	Signature	Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07407

946430017

T-VWX-009
5/89

New Jersey Department of Environmental Protection
Division of Water Resources

TOXIC ORGANIC COMPOUNDS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	Yr.	REPORTING CATEGORY
0 0 2 1 0 1 6	0 2	1 9 9 3	5 2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Filter Pressed (Wet Air Oxidized) Sludge

PARAMETER	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Pesticides and			
Aldrin	39330	0.100	*
Chlordane	39350	0.100	*
Dieldrin	39380	0.100	*
DDT	39370	0.250	*
Heptachlor	39410	0.050	*
Lindane	39782	0.050	*
PCB's	39516	0.500	*
Toxaphene	39400	1.00	*
Purgeables			
Benzene	34030	0.197	
Carbon tetrachloride	32102	0.047	*
Chloroform	32106	0.047	*
Methylene Chloride	34423	0.047	*
Tetrachloroethylene	34475	0.166	
Trichloroethylene	39180	0.047	*
Vinyl chloride	39175	0.093	*
Base/Neutrals and Acids			
Benzidine	39120	9.30	*
Benzo(a)pyrene	34247	1.86	*
Bis(2-ethylhexyl) phthalate	39100	13.9	
Hexachlorobenzene	39700	1.86	*
Hexachlorobutadiene	39702	1.86	*
N-nitrosodimethylamine	34438	3.72	*

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli — Name of Authorized Agent (Print)
Chief Chemist, PVSC — Title
 — Signature
Mar 11, 1993 — Date

Laboratory Name: Priority One Testing Laboratory
Cert No. 09399

946430018

600 WILSON AVENUE
NEWARK, N.J. 07105
(201) 344-1800
Fax: (201) 344-2951

This domestic wastewater sludge report represents dewatered cake which has been centrifuged and lime stabilized.

946430019

T-WX-007
5/89

New Jersey Department of Environmental Protection
Division of Water Resources

DOMESTIC WASTEWATER SLUDGE REPORT

DISCHARGE PERMIT NO. 0 0 2 1 0 1 6 | REPORTING PERIOD Mo. 0 2 Yr. 1 9 9 3 | REPORTING CATEGORY 5 1 | Page 2 of 2

FACILITY NAME: Passaic Valley Sewerage Commissioners

A. REPORTING CATEGORY INFORMATION

1. Permitted Wastewater Flow	(MGD)	A1:	330.0
2. Industrial Contribution	(% of influent)	A2:	18
3. Average Daily Septage Treated	(Gallons/Day)	A3:	1714

B. INFORMATION ON SLUDGE PRODUCED IN TREATMENT PROCESS

1. Average Total Solids of Sludge	(% by weight)	B1:	4.80
2. Average Daily Sludge Production	(Gallons/Day)	B2:	26028
3. Average Daily Sludge Production	(Dry Tons/Day	B3:	5202

**C. INFORMATION ON SLUDGE REMOVED FOR ULTIMATE MANAGEMENT

1. Complete ONLY If Liquid Sludge Is Removed			
a. Total Solids of Liquid Sludge	(% by weight)	C1:	
b. Average Daily Sludge Removal	(Gallons/Day	C2:	
2. Complete ONLY If Dewatered Sludge Is Removed			
a. Total Solids of Dewatered Sludge	(% by weight)	C3:	4.80
b. Complete ONE of the following:			
i. Average Daily Sludge Removal	(Gallons/Day)	C4:	
Total Solids of 2.b.i.	(% by weight)	C5:	
ii. Average Daily Sludge Removal	(Wet Cu. Yds/Day)	C6:	
iii. Average Daily Sludge Removal	(Wet Tons/Day)	C7:	1085
3. Total Average Daily Sludge Removal	(Dry Tons/Day)	C8:	5202
4. pH of Sludge Removed	(Standard Units)	C9:	9.9

D. ULTIMATE SLUDGE MANAGEMENT SITE (See Codes on Reverse)

METHOD CODE	HAULER REGISTRY	FACILITY/OPERATION	PERMIT NO.
5	17244	OUT OF STATE	

E. PATHOGEN REDUCTION INFORMATION (See Codes and Complete Reverse)

METHOD CODE	FACILITY/OPERATION	PERMIT NO.	FOR DEP USE ONLY PSRP	PFRP
D	PASSAIC VALLEY	0021016		

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli — Name of Authorized Agent (Print)
Chief Chemist — Title
[signature] — Signature
Mar. 19, 1993 — Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07250

946430020

PATHOGEN REDUCTION METHOD CODE (Appropriate sections must be completed)

A. Anaerobic Digestion; or

B. Aerobic Digestion; complete the following:

		UNIT 1	UNIT 2	UNIT 3
1. Percent Volatile Solids:				
a. Before Stabilization	(as weight % of TS)	____	____	____
b. After Stabilization	(as weight % of TS)	____	____	____
c. Percent Reduction	(see equation)	____	____	____
2. Detention Time	(Days)	____	____	____
3. Average Temperature	(Degrees C)	____	____	____

C. Air Drying (Report on any beds emptied for the report period)

BED	DATE SLUDGE LOADED Month	Day	Year	DEPTH POURED Inches	DATE SLUDGE REMOVED Month	Day	Year
1.	__	__	____	__	__	__	____
2.	__	__	____	__	__	__	____
3.	__	__	____	__	__	__	____
4.	__	__	____	__	__	__	____
5.	__	__	____	__	__	__	____

D. State Approved Lime Stabilization
E. Thermal Treatment/Drying
F. Phragmites
G. Composting
H. Other (specify here: _____)
I. None

ULTIMATE SLUDGE MANAGEMENT METHOD CODE

1. Land Application at a NJPDES Permitted Site
2. State Approved Distribution Permit
3. Incineration
4. Ocean Disposal
5. Out of State
6. Residual Not Classified as Sludge, Managed by Hazardous or Waste Flow Regs.
7. Other (specify here: _____)
8. None Removed

EQUATIONS

A. $\text{Dry Tons} = \frac{\text{Gallons (wet) X Solid Content (of the gallons)}}{240}$

B. $\text{Dry Tons} = \frac{\text{Cubic Yards (wet) X Solid Content (of the cubic yards)}}{(Y)}$

y = 1.185 where solid content is less than 15%
= 1.265 where solid content is 16% to 23%
= 1.58 where solid content is 24% to 29%
= 1.9 where solid content is greater than 30%

C. Dry Tons = Tons (wet) X Solid Content (of the wet tons)

D. $\text{Volatile Solids Reduction} = \frac{\text{VS before X VS after}}{\text{VX before} - (\text{VS before X VS after})} \times 100$

NOTE: The total and volatile solid contents in the above equations must be expressed as a decimal, for example:

1% Total Solids = .01
20% Total Solids = .20

Alternative equations may be utilized if approved in writing by NJDEP.

946430021

New Jersey Department of Environmental Protection
Division of Water Resources

METALS AND SELECTED CHEMICAL PARAMETERS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY
0 0 2 1 0 1 6	0 1	1 9 9 3	5 2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Centrifuged (Lime Stabilized) Sludge

PARAMETER	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Metals			
Arsenic	01002	2.44	
Beryllium	01012	0.40	*
Cadmium	61527	1.16	
Chromium	61512	16.53	
Copper	61506	32.39	
Iron	01045	2770	
Lead	61503	177	
Mercury	01260	0.53	
Molybdenum	01062	1.42	
Nickel	61515	34.8	
Selenium	61518	1.25	
Zinc	61509	424.5	
Selected Chemical			
Total Nitrogen	00625	30256	
Ammonia Nitrogen	71845	869	
Nitrate Nitrogen	71850	21.5	
Oil and Grease	00550	37220	
Phenols	46000	8.22	
Phosphorus	00665	6600	
Calcium	00916	154500	
Magnesium	00927	2302	
Potassium	00937	992	
Cyanide	00720	1.277	
Fluoride	00951	31.5	
Chloride	00940	4290	

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli — Name of Authorized Agent (Print)
Chief Chemist — Title
[signature] — Signature
Mar 23, 1993 — Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07407

946430022

New Jersey Department of Environmental Protection
Division of Water Resources

TOXIC ORGANIC COMPOUNDS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	Yr.	REPORTING CATEGORY
0 0 2 1 0 1 6	0 2	1 9 9 3	5 2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Centrifuged (Lime Stabilized) Sludge

PARAMETER	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Pesticides and			
Aldrin	39330	0.100	*
Chlordane	39350	0.100	*
Dieldrin	39380	0.100	*
DDT	39370	0.250	*
Heptachlor	39410	0.050	*
Lindane	39782	0.050	*
PCB's	39516	0.500	*
Toxaphene	39400	1.00	*
Purgeables			
Benzene	34030	5.07	*
Carbon tetrachloride	32102	5.07	*
Chloroform	32106	5.07	*
Methylene Chloride	34423	5.07	*
Tetrachloroethylene	34475	5.07	*
Trichloroethylene	39180	5.07	*
Vinyl chloride	39175	10.1	*
Base/Neutrals and Acids			
Benzidine	39120	1.92	*
Benzo(a)pyrene	34247	0.384	*
Bis(2-ethylhexyl) phthalate	39100	3.59	
Hexachlorobenzene	39700	0.384	*
Hexachlorobutadiene	39702	0.384	*
N-nitrosodimethylamine	34438	0.768	*

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli — Name of Authorized Agent (Print)
Chief Chemist, PVSC — Title
 — Signature
Mar 11, 1993 — Date

Laboratory Name: Priority One Testing Laboratory
Cert No. 09399

946430023

MONITORING REPORT – TRANSMITTAL SHEET

Page 1 of 1

NJPDES NO.	REPORTING PERIOD MO. YR.		MO. YR.
0 0 2 1 1 0 1 6	0 3 9 3	THRU	0 3 9 3

PERMITTEE:

Name: Passaic Valley Sewerage Commissioners

Address: 600 Wilson Avenue

Newark, New Jersey 07105

FACILITY:

Name: Passaic Valley Sewerage Commissioners

Address: 600 Wilson Avenue

Newark, N.J. 07105 (County) Essex

Telephone (201) 344-1800

* For reporting period 3/93
** For reporting period 2/93

FORMS ATTACHED *(Indicate Quantity of Each)*

SLUDGE REPORTS - SANITARY

[1]* T-VWX-007 [1]** T-VWX-008 [1]* T-VWX-009

SLUDGE REPORTS - INDUSTRIAL

[ ] T-VWX-010A [ ] T-VWX-010B

WASTEWATER REPORTS

[ ] T-VWX-011 [ ] T-VWX-012 [ ] T-VWX-013

GROUNDWATER REPORTS

[ ] VWX-015(A,B) [ ] VWX-016 [ ] VWX-017

NPDES DISCHARGE MONITORING REPORT

[ ] EPA FORM 3320-1

OPERATING EXCEPTIONS

	YES	NO
DYE TESTING	☐	☐
TEMPORARY BYPASSING	☐	☐
DISINFECTION INTERRUPTION	☐	☐
MONITORING MALFUNCTIONS	☐	☐
UNITS OUT OF OPERATION	☐	☐
OTHER	☐	☐

(Detail any "Yes" on reverse side in appropriate space.)

NOTE: ***The "Hours Attended at Plant" on the reverse of this sheet must also be completed.***

AUTHENTICATION - I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

LICENSED OPERATOR

Name *(Printed)* Phil Habrukowich

Grade & Registry No. NJ S-4, #3972

Signature

Date 4/23/93

PRINCIPAL EXECUTIVE OFFICER or DULY AUTHORIZED REPRESENTATIVE

Name *(Printed)* Carmine T. Perrapato

Title *(Printed)* Executive Director

Signature

Date 4/23/93

946430024

Passaic Valley
Sewerage Commissioners

600 WILSON AVENUE
NEWARK, N.J. 07105
(201) 344-1800
Fax: (201) 344-2951

This domestic wastewater sludge report represents dewatered cake which originated from our Zimpro process.

946430025

T-VWX-007
5/89

New Jersey Department of Environmental Protection
Division of Water Resources

DOMESTIC WASTEWATER SLUDGE REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY		
0 0 2 1 0 1 6	0 3	1 9 9 3	5	1	Page 1 of 2

FACILITY NAME: Passaic Valley Sewerage Commissioners

A. REPORTING CATEGORY INFORMATION

1. Permitted Wastewater Flow	(MGD)	A1:	330.0
2. Industrial Conribution	(% of influent)	A2:	18.
3. Average Daily Septage Treated	(Gallons/Day)	A3:	2129.

B. INFORMATION ON SLUDGE PRODUCED IN TREATMENT PROCESS

1. Average Total Solids of Sludge	(% by weight)	B1:	5.26
2. Average Daily Sludge Production	(Gallons/Day)	B2:	78042.
3. Average Daily Sludge Production	(Dry Tons/Day	B3:	17.118

**C. INFORMATION ON SLUDGE REMOVED FOR ULTIMATE MANAGEMENT

1. Complete ONLY If Liquid Sludge Is Removed			
a. Total Solids of Liquid Sludge	(% by weight)	C1:	.
b. Average Daily Sludge Removal	(Gallons/Day	C2:	.
2. Complete ONLY If Dewatered Sludge Is Removed			
a. Total Solids of Dewatered Sludge	(% by weight)	C3:	5.26
b. Complete ONE of the following:			
i. Average Daily Sludge Removal	(Gallons/Day)	C4:	.
Total Solids of 2.b.i.	(% by weight)	C5:	.
ii. Average Daily Sludge Removal	(Wet Cu. Yds/Day)	C6:	.
iii. Average Daily Sludge Removal	(Wet Tons/Day)	C7:	325.2
3. Total Average Daily Sludge Removal	(Dry Tons/Day)	C8:	17.118
4. pH of Sludge Removed	(Standard Units)	C9:	5.3

D. ULTIMATE SLUDGE MANAGEMENT SITE (See Codes on Reverse)

METHOD CODE	HAULER REGISTRY	FACILITY/OPERATION	PERMIT NO.
5	17244	OUT OF STATE	

E. PATHOGEN REDUCTION INFORMATION (See Codes and Complete Reverse)

METHOD CODE	FACILITY/OPERATION	PERMIT NO.	FOR DEP USE ONLY PSRP	FOR DEP USE ONLY PFRP
E	PASSAIC VALLEY	0021016		

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli	Chief Chemist		APR 13, 1993
Name of Authorized Agent (Print)	Title	Signature	Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07250

946430026

PATHOGEN REDUCTION METHOD CODE (Appropriate sections must be completed)

A. Anaerobic Digestion; or

B. Aerobic Digestion; complete the following:

		UNIT 1	UNIT 2	UNIT 3
1. Percent Volatile Solids:				
a. Before Stabilization	(as weight % of TS)			
b. After Stabilization	(as weight % of TS)			
c. Percent Reduction	(see equation)			
2. Detention Time	(Days)			
3. Average Temperature	(Degrees C)			

C. Air Drying (Report on any beds emptied for the report period)

BED	DATE SLUDGE LOADED Month	Day	Year	DEPTH POURED Inches	DATE SLUDGE REMOVED Month	Day	Year
1.							
2.							
3.							
4.							
5.							

D. State Approved Lime Stabilization
E. Thermal Treatment/Drying
F. Phragmites
G. Composting
H. Other (specify here: _____)
I. None

ULTIMATE SLUDGE MANAGEMENT METHOD CODE

1. Land Application at a NJPDES Permitted Site
2. State Approved Distribution Permit
3. Incineration
4. Ocean Disposal
5. Out of State
6. Residual Not Classified as Sludge, Managed by Hazardous or Waste Flow Regs.
7. Other (specify here: _____)
8. None Removed

EQUATIONS

A. $\text{Dry Tons} = \frac{\text{Gallons (wet) X Solid Content (of the gallons)}}{240}$

B. $\text{Dry Tons} = \frac{\text{Cubic Yards (wet) X Solid Content (of the cubic yards)}}{(Y)}$

y = 1.185 where solid content is less than 15%
= 1.265 where solid content is 16% to 23%
= 1.58 where solid content is 24% to 29%
= 1.9 where solid content is greater than 30%

C. Dry Tons = Tons (wet) X Solid Content (of the wet tons)

D. $\text{Volatile Solids Reduction} = \frac{\text{VS before X VS after}}{\text{VX before} - (\text{VS before X VS after})} \times 100$

NOTE: The total and volatile solid contents in the above equations must be expressed as a decimal, for example:

1% Total Solids = .01
20% Total Solids = .20

Alternative equations may be utilized if approved in writing by NJDEP.

946430027

New Jersey Department of Environmental Protection
Division of Water Resources

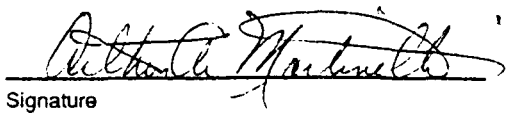
METALS AND SELECTED CHEMICAL PARAMETERS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	Yr.	REPORTING CATEGORY
0 0 2 1 0 1 6	0 2	1 9 9 3	5 2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Filter Press (Wet Air Oxidized) Sludge)

PARAMETER	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Metals			
Arsenic	01002	195	*
Beryllium	01012	148	*
Cadmium	61527	2220	
Chromium	61512	52985	
Copper	61506	12310	
Iron	01045	9610	
Lead	61503	4170	
Mercury	01260	195	
Molybdenum	01062	127	
Nickel	61515	8015	
Selenium	61518	575	
Zinc	61509	1289	
Selected Chemical			
Total Nitrogen	00625	25550	
Ammonia Nitrogen	71845	997	
Nitrate Nitrogen	71850	048	
Oil and Grease	00550	14667 9	
Phenols	46000	16321	
Phosphorus	00665	11900	
Calcium	00916	19375	
Magnesium	00927	3268	
Potassium	00937	640	
Cyanide	00720	622	
Fluoride	00951	130	
Chloride	00940	185	

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli — Name of Authorized Agent (Print)
Chief Chemist — Title
 — Signature
Apr. 6, 1993 — Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07407

946430028

T-VWX-003
5/89

New Jersey Department of Environmental Protection
Division of Water Resources

TOXIC ORGANIC COMPOUNDS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	Yr.	REPORTING CATEGORY
0 0 2 1 0 1 6	0 3	1 9 9 3	5 2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Filter Pressed (Wet Air Oxidized) Sludge

PARAMETER	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Pesticides and			
Aldrin	39330	0.009	*
Chlordane	39350	0.127	*
Dieldrin	39380	0.010	*
DDT	39370	0.053	*
Heptachlor	39410	0.004	*
Lindane	39782	0.011	*
PCB's	39516	0.635	*
Toxaphene	39400	1.27	*
Purgeables			
Benzene	34030	0.182	
Carbon tetrachloride	32102	0.048	*
Chloroform	32106	0.048	*
Methylene Chloride	34423	0.048	*
Tetrachloroethylene	34475	0.185	*
Trichloroethylene	39180	0.048	*
Vinyl chloride	39175	0.095	*
Base/Neutrals and Acids			
Benzidine	39120	3.18	*
Benzo(a)pyrene	34247	1.64	*
Bis(2-ethylhexyl) phthalate	39100	942	
Hexachlorobenzene	39700	1.64	*
Hexachlorobutadiene	39702	1.64	*
N-nitrosodimethylamine	34438	1.27	*

CERTIFICATE OF AUTHENTICITY

Name of Authorized Agent (Print)	Title	Signature	Date
Arthur A.Martinelli	Chief Chemist, PVSC		APR 13, 1993

Laboratory Name: Priority One Testing Laboratory

Cert No. 09399

946430029

Passaic Valley
Sewerage Commissioners

600 WILSON AVENUE
NEWARK, N.J. 07105
(201) 344-1800
Fax: (201) 344-2951

This domestic wastewater sludge report represents dewatered cake which has been centrifuged and lime stabilized.

946430030

T-WX-007
5/89

New Jersey Department of Environmental Protection
Division of Water Resources

DOMESTIC WASTEWATER SLUDGE REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY		
0 0 2 1 0 1 6	0 3	1 9 9 3	5	1	Page 2 of 2

FACILITY NAME: Passaic Valley Sewerage Commissioners

A. REPORTING CATEGORY INFORMATION

1. Permitted Wastewater Flow	(MGD)	A1:	330.0
2. Industrial Conribution	(% of influent)	A2:	18.
3. Average Daily Septage Treated	(Gallons/Day)	A3:	2129

B. INFORMATION ON SLUDGE PRODUCED IN TREATMENT PROCESS

1. Average Total Solids of Sludge	(% by weight)	B1:	4.45
2. Average Daily Sludge Production	(Gallons/Day)	B2:	119800
3. Average Daily Sludge Production	(Dry Tons/Day	B3:	22.21

**C. INFORMATION ON SLUDGE REMOVED FOR ULTIMATE MANAGEMENT

1. Complete ONLY If Liquid Sludge Is Removed			
a. Total Solids of Liquid Sludge	(% by weight)	C1:	
b. Average Daily Sludge Removal	(Gallons/Day	C2:	
2. Complete ONLY If Dewatered Sludge Is Removed			
a. Total Solids of Dewatered Sludge	(% by weight)	C3:	4.45
b. Complete ONE of the following:			
i. Average Daily Sludge Removal	(Gallons/Day)	C4:	
Total Solids of 2.b.i.	(% by weight)	C5:	
ii. Average Daily Sludge Removal	(Wet Cu. Yds/Day)	C6:	
iii. Average Daily Sludge Removal	(Wet Tons/Day)	C7:	499
3. Total Average Daily Sludge Removal	(Dry Tons/Day)	C8:	22.21
4. pH of Sludge Removed	(Standard Units)	C9:	11.1

D. ULTIMATE SLUDGE MANAGEMENT SITE (See Codes on Reverse)

METHOD CODE	HAULER REGISTRY	FACILITY/OPERATION	PERMIT NO.
5	17244	OUT OF STATE	

E. PATHOGEN REDUCTION INFORMATION (See Codes and Complete Reverse)

METHOD CODE	FACILITY/OPERATION	PERMIT NO.	FOR DEP USE ONLY PSRP	FOR DEP USE ONLY PFRP
D	PASSAIC VALLEY	0021016		

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli	Chief Chemist		APR 13, 1993
Name of Authorized Agent (Print)	Title	Signature	Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07250

946430031

PATHOGEN REDUCTION METHOD CODE (Appropriate sections must be completed)

A. Anaerobic Digestion; or

B. Aerobic Digestion; complete the following:

		UNIT 1	UNIT 2	UNIT 3
1. Percent Volatile Solids:				
a. Before Stabilization	(as weight % of TS)			
b. After Stabilization	(as weight % of TS)			
c. Percent Reduction	(see equation)			
2. Detention Time	(Days)			
3. Average Temperature	(Degrees C)			

C. Air Drying (Report on any beds emptied for the report period)

BED	DATE SLUDGE LOADED Month	Day	Year	DEPTH POURED Inches	DATE SLUDGE REMOVED Month	Day	Year
1.							
2.							
3.							
4.							
5.							

D. State Approved Lime Stabilization
E. Thermal Treatment/Drying
F. Phragmites
G. Composting
H. Other (specify here: _____)
I. None

ULTIMATE SLUDGE MANAGEMENT METHOD CODE

1. Land Application at a NJPDES Permitted Site
2. State Approved Distribution Permit
3. Incineration
4. Ocean Disposal
5. Out of State
6. Residual Not Classified as Sludge, Managed by Hazardous or Waste Flow Regs.
7. Other (specify here: _____)
8. None Removed

EQUATIONS

A. Dry Tons = $\frac{\text{Gallons (wet) X Solid Content (of the gallons)}}{240}$

B. Dry Tons = $\frac{\text{Cubic Yards (wet) X Solid Content (of the cubic yards)}}{(Y)}$

y = 1.185 where solid content is less than 15%
= 1.265 where solid content is 16% to 23%
= 1.58 where solid content is 24% to 29%
= 1.9 where solid content is greater than 30%

C. Dry Tons = Tons (wet) X Solid Content (of the wet tons)

D. Volatile Solids Reduction = $\frac{\text{VS before X VS after}}{\text{VX before— (VS before X VS after)}}$ X 100

NOTE: The total and volatile solid contents in the above equations must be expressed as a decimal, for example:

1% Total Solids = .01
20% Total Solids = .20

Alternative equations may be utilized if approved in writing by NJDEP.

946430032

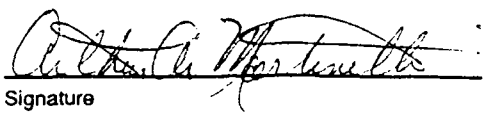
METALS AND SELECTED CHEMICAL PARAMETERS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	Yr.	REPORTING CATEGORY
0 0 2 1 0 1 6	0 2	1 9 9 3	5 2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Centrifuged (Lime Stabilized) Sludge

PARAMETER	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Metals			
Arsenic	01002	0 7 8	
Beryllium	01012	0 3 9	*
Cadmium	61527	8 9 0	
Chromium	61512	1 2 4 6	
Copper	61506	3 3 7 5 5	
Iron	01045	2 4 4 0	
Lead	61503	1 8 9	
Mercury	01260	0 4 9	
Molybdenum	01062	1 3 8	
Nickel	61515	3 4 9	
Selenium	61518	2 5 8	
Zinc	61509	4 1 5	
Selected Chemical			
Total Nitrogen	00625	1 5 5 5 4	
Ammonia Nitrogen	71845	2 5 3	
Nitrate Nitrogen	71850	0 7 2	
Oil and Grease	00550	1 8 5 8 3	
Phenols	46000	2 4 2 9	
Phosphorus	00665	3 8 6 0	
Calcium	00916	2 2 4 2 5 0	
Magnesium	00927	2 7 5 5	
Potassium	00937	1 0 1 6	
Cyanide	00720	5 0 8	
Fluoride	00951	2 1 9	
Chloride	00940	5 3 2 0	

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli — Name of Authorized Agent (Print)
Chief Chemist — Title
 — Signature
Apr. 6, 1993 — Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07407

946430033

New Jersey Department of Environmental Protection
Division of Water Resources

TOXIC ORGANIC COMPOUNDS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY
0021016	03	1993	52

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Centrifuged (Lime Stabilized) Sludge

PARAMETER	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Pesticides and			
Aldrin	39330	0.001	*
Chlordane	39350	0.014	*
Dieldrin	39380	0.001	*
DDT	39370	0.006	*
Heptachlor	39410	0.001	*
Lindane	39782	0.001	*
PCB's	39516	0.072	*
Toxaphene	39400	0.144	*
Purgeables			
Benzene	34030	0.058	*
Carbon tetrachloride	32102	0.058	*
Chloroform	32106	0.058	*
Methylene Chloride	34423	0.058	*
Tetrachloroethylene	34475	0.086	
Trichloroethylene	39180	0.058	*
Vinyl chloride	39175	0.115	*
Base/Neutrals and Acids			
Benzidine	39120	0.360	*
Benzo(a)pyrene	34247	0.072	*
Bis(2-ethylhexyl) phthalate	39100	3.83	
Hexachlorobenzene	39700	0.072	*
Hexachlorobutadiene	39702	0.072	*
N-nitrosodimethylamine	34438	0.144	*
_____	_____		
_____	_____		

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli — Name of Authorized Agent (Print)
Chief Chemist, PVSC — Title
Signature
APR 13, 1993 — Date

Laboratory Name: Priority One Testing Laboratory
Cert No. 09399

946430034

MONITORING REPORT – TRANSMITTAL SHEET

NJPDES NO.	REPORTING PERIOD MO. YR.		MO. YR.
0 0 2 1 0 1 6	0 4 9 3	THRU	0 4 9 3

PERMITTEE: Name Passaic Valley Sewerage Commissioners

Address 600 Wilson Avenue

Newark, New Jersey 07105

FACILITY: Name Passaic Valley Sewerage Commissioners

Address 600 Wilson Avenue

Newark, N.J. 07105 (County) Essex

Telephone (201) 344-1800

* – For reporting period 4/93
** – For reporting period 3/93

FORMS ATTACHED *(Indicate Quantity of Each)*

SLUDGE REPORTS - SANITARY

[1]* T-VWX-007 [1]** T-VWX-008 [1]* T-VWX-009

SLUDGE REPORTS - INDUSTRIAL

[ ] T-VWX-010A [ ] T-VWX-010B

WASTEWATER REPORTS

[ ] T-VWX-011 [ ] T-VWX-012 [ ] T-VWX-013

GROUNDWATER REPORTS

[ ] VWX-015(A,B) [ ] VWX-016 [ ] VWX-017

NPDES DISCHARGE MONITORING REPORT

[ ] EPA FORM 3320-1

OPERATING EXCEPTIONS

	YES	NO
DYE TESTING	☐	☐
TEMPORARY BYPASSING	☐	☐
DISINFECTION INTERRUPTION	☐	☐
MONITORING MALFUNCTIONS	☐	☐
UNITS OUT OF OPERATION	☐	☐
OTHER	☐	☐

(Detail any "Yes" on reverse side in appropriate space.)

***NOTE:** The "Hours Attended at Plant" on the reverse of this sheet must also be completed.*

AUTHENTICATION - I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

LICENSED OPERATOR

Name *(Printed)* Phil Habrukowich

Grade & Registry No. NJ S-A #3972

Signature Phil Habrukowich

Date 5/24/93

PRINCIPAL EXECUTIVE OFFICER or DULY AUTHORIZED REPRESENTATIVE

Name *(Printed)* Carmine T. Perrapato

Title *(Printed)* Executive Director

Signature Carmine T. Perrapato

Date 5/24/93

946430035

Passaic Valley
Sewerage Commissioners

600 WILSON AVENUE
NEWARK, N.J. 07105
(201) 344-1800
Fax: (201) 344-2951

This domestic wastewater sludge report represents dewatered cake which originated from our Zimpro process.

946430036

T-VWX-007
5/89

New Jersey Department of Environmental Protection
Division of Water Resources

DOMESTIC WASTEWATER SLUDGE REPORT

DISCHARGE PERMIT NO. 0 0 2 1 0 1 6 | REPORTING PERIOD Mo. 0 4 Yr. 1 9 9 3 | REPORTING CATEGORY 5 1 | Page 1 of 2

FACILITY NAME: Passaic Valley Sewerage Commissioners

A. REPORTING CATEGORY INFORMATION

1. Permitted Wastewater Flow	(MGD)	A1:	330.0
2. Industrial Conribution	(% of influent)	A2:	18.
3. Average Daily Septage Treated	(Gallons/Day)	A3:	22333

B. INFORMATION ON SLUDGE PRODUCED IN TREATMENT PROCESS

1. Average Total Solids of Sludge	(% by weight)	B1:	55.7
2. Average Daily Sludge Production	(Gallons/Day)	B2:	644008.
3. Average Daily Sludge Production	(Dry Tons/Day	B3:	149.39

**C. INFORMATION ON SLUDGE REMOVED FOR ULTIMATE MANAGEMENT

1. Complete ONLY If Liquid Sludge Is Removed			
a. Total Solids of Liquid Sludge	(% by weight)	C1:	
b. Average Daily Sludge Removal	(Gallons/Day	C2:	
2. Complete ONLY If Dewatered Sludge Is Removed			
a. Total Solids of Dewatered Sludge	(% by weight)	C3:	55.7
b. Complete ONE of the following:			
i. Average Daily Sludge Removal	(Gallons/Day)	C4:	
Total Solids of 2.b.i.	(% by weight)	C5:	
ii. Average Daily Sludge Removal	(Wet Cu. Yds/Day)	C6:	
iii. Average Daily Sludge Removal	(Wet Tons/Day)	C7:	268.4
3. Total Average Daily Sludge Removal	(Dry Tons/Day)	C8:	149.39
4. pH of Sludge Removed	(Standard Units)	C9:	5.0

D. ULTIMATE SLUDGE MANAGEMENT SITE (See Codes on Reverse)

METHOD CODE	HAULER REGISTRY	FACILITY/OPERATION	PERMIT NO.
5	17244	OUT OF STATE	

E. PATHOGEN REDUCTION INFORMATION (See Codes and Complete Reverse)

METHOD CODE	FACILITY/OPERATION	PERMIT NO.	FOR DEP USE ONLY PSRP	PFRP
E	PASSAIC VALLEY	0021016		

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli — Name of Authorized Agent (Print)
Chief Chemist — Title
[signature] — Signature
May 18, 1993 — Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07250

946430037

PATHOGEN REDUCTION METHOD CODE (Appropriate sections must be completed)

A. Anaerobic Digestion; *or*

B. Aerobic Digestion; complete the following:

		UNIT 1	UNIT 2	UNIT 3
1. Percent Volatile Solids:				
a. Before Stabilization	(as weight % of TS)	__.__	__.__	__.__
b. After Stabilization	(as weight % of TS)	__.__	__.__	__.__
c. Percent Reduction	(see equation)	__.__	__.__	__.__
2. Detention Time	(Days)	____	____	____
3. Average Temperature	(Degrees C)	__.__	__.__	__.__

C. Air Drying (Report on any beds emptied for the report period)

BED	DATE SLUDGE LOADED Month	Day	Year	DEPTH POURED Inches	DATE SLUDGE REMOVED Month	Day	Year
1.	__	__	____	__	__	__	____
2.	__	__	____	__	__	__	____
3.	__	__	____	__	__	__	____
4.	__	__	____	__	__	__	____
5.	__	__	____	__	__	__	____

D. State Approved Lime Stabilization
E. Thermal Treatment/Drying
F. Phragmites
G. Composting
H. Other (specify here: _____)
I. None

ULTIMATE SLUDGE MANAGEMENT METHOD CODE

1. Land Application at a NJPDES Permitted Site
2. State Approved Distribution Permit
3. Incineration
4. Ocean Disposal
5. Out of State
6. Residual Not Classified as Sludge, Managed by Hazardous or Waste Flow Regs.
7. Other (specify here: _____)
8. None Removed

EQUATIONS

A. $\text{Dry Tons} = \dfrac{\text{Gallons (wet) X Solid Content (of the gallons)}}{240}$

B. $\text{Dry Tons} = \dfrac{\text{Cubic Yards (wet) X Solid Content (of the cubic yards)}}{(Y)}$

y = 1.185 where solid content is less than 15%
= 1.265 where solid content is 16% to 23%
= 1.58 where solid content is 24% to 29%
= 1.9 where solid content is greater than 30%

C. Dry Tons = Tons (wet) X Solid Content (of the wet tons)

D. $\text{Volatile Solids Reduction} = \dfrac{\text{VS before X VS after}}{\text{VX before} - (\text{VS before X VS after})} \times 100$

NOTE: The total and volatile solid contents in the above equations must be expressed as a decimal, for example:

1% Total Solids = .01
20% Total Solids = .20

Alternative equations may be utilized if approved in writing by NJDEP.

946430038

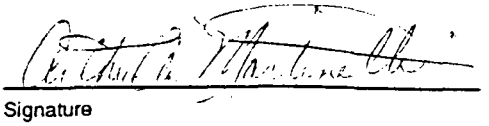
METALS AND SELECTED CHEMICAL PARAMETERS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY
0 0 2 1 0 1 6	0 3	1 9 9 3	5 2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Filter Press (Wet Air Oxidized) Sludge)

PARAMETER	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Metals			
Arsenic	01002	369	
Beryllium	01012	065	*
Cadmium	61527	185	
Chromium	61512	4040 5	
Copper	61506	1070 75	
Iron	01045	8920	
Lead	61503	365	
Mercury	01260	161	
Molybdenum	01062	171	
Nickel	61515	6760	
Selenium	61518	515	
Zinc	61509	1085	
Selected Chemical			
Total Nitrogen	00625	26378	
Ammonia Nitrogen	71845	250	
Nitrate Nitrogen	71850	19	*
Oil and Grease	00550	134030	
Phenols	46000	11692	
Phosphorus	00665	11700	
Calcium	00916	12600	
Magnesium	00927	2403	
Potassium	00937	1004	
Cyanide	00720	640	
Fluoride	00951	955	
Chloride	00940	186	

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli — Name of Authorized Agent (Print)
Chief Chemist — Title
 — Signature
MAY 13, 1993 — Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07407

946430039

T-VWX-009
5/89

New Jersey Department of Environmental Protection
Division of Water Resources

TOXIC ORGANIC COMPOUNDS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	Yr.	REPORTING CATEGORY
0 0 2 1 0 1 6	0 4	1 9 9 3	5 2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Filter Pressed (Wet Air Oxidized) Sludge

PARAMETER	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Pesticides and			
Aldrin	39330	0.023	*
Chlordane	39350	0.334	*
Dieldrin	39380	0.027	*
DDT	39370	0.140	*
Heptachlor	39410	0.010	*
Lindane	39782	0.030	*
PCB's	39516	1.67	*
Toxaphene	39400	3.34	*
Purgeables			
Benzene	34030	0.194	
Carbon tetrachloride	32102	0.045	*
Chloroform	32106	0.045	*
Methylene Chloride	34423	0.045	*
Tetrachloroethylene	34475	0.166	
Trichloroethylene	39180	0.045	*
Vinyl chloride	39175	0.089	*
Base/Neutrals and Acids			
Benzidine	39120	8.94	*
Benzo(a)pyrene	34247	1.79	*
Bis(2-ethylhexyl) phthalate	39100	46.0	
Hexachlorobenzene	39700	1.79	*
Hexachlorobutadiene	39702	1.79	*
N-nitrosodimethylamine	34438	3.58	*

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli — Name of Authorized Agent (Print)
Chief Chemist, PVSC — Title
Signature
MAY 13, 1993 — Date

Laboratory Name: Priority One Testing Laboratory
Cert No. 09399

946430040

600 WILSON AVENUE
NEWARK, N.J. 07105
(201) 344-1800
Fax: (201) 344-2951

This domestic wastewater sludge report represents dewatered cake which has been centrifuged and lime stabilized.

946430041

T-VWX-007
5/89

New Jersey Department of Environmental Protection
Division of Water Resources

DOMESTIC WASTEWATER SLUDGE REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY		
0021016	04	1993	5	1	Page 2 of 2

FACILITY NAME: Passaic Valley Sewerage Commissioners

A. REPORTING CATEGORY INFORMATION

1. Permitted Wastewater Flow	(MGD)	A1:	330.0
2. Industrial Conribution	(% of influent)	A2:	18
3. Average Daily Septage Treated	(Gallons/Day)	A3:	2233

B. INFORMATION ON SLUDGE PRODUCED IN TREATMENT PROCESS

1. Average Total Solids of Sludge	(% by weight)	B1:	4.66
2. Average Daily Sludge Production	(Gallons/Day)	B2:	131681
3. Average Daily Sludge Production	(Dry Tons/Day	B3:	2558

**C. INFORMATION ON SLUDGE REMOVED FOR ULTIMATE MANAGEMENT

1. Complete ONLY If Liquid Sludge Is Removed			
a. Total Solids of Liquid Sludge	(% by weight)	C1:	
b. Average Daily Sludge Removal	(Gallons/Day	C2:	
2. Complete ONLY If Dewatered Sludge Is Removed			
a. Total Solids of Dewatered Sludge	(% by weight)	C3:	4.66
b. Complete ONE of the following:			
i. Average Daily Sludge Removal	(Gallons/Day)	C4:	
Total Solids of 2.b.i.	(% by weight)	C5:	
ii. Average Daily Sludge Removal	(Wet Cu. Yds/Day)	C6:	
iii. Average Daily Sludge Removal	(Wet Tons/Day)	C7:	549
3. Total Average Daily Sludge Removal	(Dry Tons/Day)	C8:	2558
4. pH of Sludge Removed	(Standard Units)	C9:	11.1

D. ULTIMATE SLUDGE MANAGEMENT SITE (See Codes on Reverse)

METHOD CODE	HAULER REGISTRY	FACILITY/OPERATION	PERMIT NO.
5	17244	OUT OF STATE	

E. PATHOGEN REDUCTION INFORMATION (See Codes and Complete Reverse)

METHOD CODE	FACILITY/OPERATION	PERMIT NO.	FOR DEP USE ONLY PSRP	FOR DEP USE ONLY PFRP
D	PASSAIC VALLEY	0021016		

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli	Chief Chemist		May 18, 1993
Name of Authorized Agent (Print)	Title	Signature	Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07250

946430042

PATHOGEN REDUCTION METHOD CODE (Appropriate sections must be completed)

A. Anaerobic Digestion; or

B. Aerobic Digestion; complete the following:

		UNIT 1	UNIT 2	UNIT 3
1. Percent Volatile Solids:				
a. Before Stabilization	(as weight % of TS)	____	____	____
b. After Stabilization	(as weight % of TS)	____	____	____
c. Percent Reduction	(see equation)	____	____	____
2. Detention Time	(Days)	____	____	____
3. Average Temperature	(Degrees C)	____	____	____

C. Air Drying (Report on any beds emptied for the report period)

BED	DATE SLUDGE LOADED Month	Day	Year	DEPTH POURED Inches	DATE SLUDGE REMOVED Month	Day	Year
1.	__	__	____	__	__	__	____
2.	__	__	____	__	__	__	____
3.	__	__	____	__	__	__	____
4.	__	__	____	__	__	__	____
5.	__	__	____	__	__	__	____

D. State Approved Lime Stabilization
E. Thermal Treatment/Drying
F. Phragmites
G. Composting
H. Other (specify here: _____)
I. None

ULTIMATE SLUDGE MANAGEMENT METHOD CODE

1. Land Application at a NJPDES Permitted Site
2. State Approved Distribution Permit
3. Incineration
4. Ocean Disposal
5. Out of State
6. Residual Not Classified as Sludge, Managed by Hazardous or Waste Flow Regs.
7. Other (specify here: _____)
8. None Removed

EQUATIONS

A. $\text{Dry Tons} = \frac{\text{Gallons (wet) X Solid Content (of the gallons)}}{240}$

B. $\text{Dry Tons} = \frac{\text{Cubic Yards (wet) X Solid Content (of the cubic yards)}}{(Y)}$

y = 1.185 where solid content is less than 15%
= 1.265 where solid content is 16% to 23%
= 1.58 where solid content is 24% to 29%
= 1.9 where solid content is greater than 30%

C. Dry Tons = Tons (wet) X Solid Content (of the wet tons)

D. $\text{Volatile Solids Reduction} = \frac{\text{VS before X VS after}}{\text{VX before} - (\text{VS before X VS after})} \times 100$

NOTE: The total and volatile solid contents in the above equations must be expressed as a decimal, for example:

1% Total Solids = .01
20% Total Solids = .20

Alternative equations may be utilized if approved in writing by NJDEP.

946430043

METALS AND SELECTED CHEMICAL PARAMETERS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY
0 0 2 1 0 1 6	0 3	1 9 9 3	5 2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Centrifuged (Lime Stabilized) Sludge

PARAMETER	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Metals			
Arsenic	01002	137	
Beryllium	01012	052	*
Cadmium	61527	725	
Chromium	61512	9280	
Copper	61506	2427	
Iron	01045	2410	
Lead	61503	213	
Mercury	01260	033	
Molybdenum	01062	166	
Nickel	61515	3530	
Selenium	61518	046	*
Zinc	61509	307	
Selected Chemical			
Total Nitrogen	00625	8319	
Ammonia Nitrogen	71845	466	
Nitrate Nitrogen	71850	410	
Oil and Grease	00550	16938	
Phenols	46000	1506	
Phosphorus	00665	4210	
Calcium	00916	246750	
Magnesium	00927	2478	
Potassium	00937	911	
Cyanide	00720	1137	
Fluoride	00951	215	
Chloride	00940	2160	

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli	Chief Chemist		MAY 13, 1993
Name of Authorized Agent (Print)	Title	Signature	Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07407

946430044

New Jersey Department of Environmental Protection
Division of Water Resources

TOXIC ORGANIC COMPOUNDS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	Yr.	REPORTING CATEGORY
0 0 2 1 0 1 6	0 4	1 9 9 3	5 2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Centrifuged (Lime Stabilized) Sludge

PARAMETER	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Pesticides and			
Aldrin	39330	0.006	*
Chlordane	39350	0.081	*
Dieldrin	39380	0.006	*
DDT	39370	0.034	*
Heptachlor	39410	0.002	*
Lindane	39782	0.007	*
PCB's	39516	0.406	*
Toxaphene	39400	0.811	*
Purgeables			
Benzene	34030	0.520	*
Carbon tetrachloride	32102	0.520	*
Chloroform	32106	0.520	*
Methylene Chloride	34423	0.520	*
Tetrachloroethylene	34475	0.520	*
Trichloroethylene	39180	0.520	*
Vinyl chloride	39175	1.040	*
Base/Neutrals and Acids			
Benzidine	39120	0.346	*
Benzo(a)pyrene	34247	0.069	*
Bis(2-ethylhexyl) phthalate	39100	1.46	
Hexachlorobenzene	39700	0.069	*
Hexachlorobutadiene	39702	0.069	*
N-nitrosodimethylamine	34438	0.138	*

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli — Name of Authorized Agent (Print)
Chief Chemist, PVSC — Title
[signature] — Signature
May 21, 1993 — Date

Laboratory Name: Priority One Testing Laboratory
Cert No. 09399

946430045

MONITORING REPORT – TRANSMITTAL SHEET

NJPDES NO.	REPORTING PERIOD MO. YR.		MO. YR.
0 0 2 1 0 1 6	0 5 9 3	THRU	0 5 9 3

PERMITTEE:

Name: Passaic Valley Sewerage Commissioners

Address: 600 Wilson Avenue

Newark, New Jersey 07105

FACILITY:

Name: Passaic Valley Sewerage Commissioners

Address: 600 Wilson Avenue

Newark, N.J. 07105 (County) Essex

Telephone (201) 344-1800

* For reporting period 5/93
** For reporting period 4/93

FORMS ATTACHED *(Indicate Quantity of Each)*

SLUDGE REPORTS - SANITARY

[1]* T-VWX-007 [1]** T-VWX-008 [1]* T-VWX-009

SLUDGE REPORTS - INDUSTRIAL

[ ] T-VWX-010A [ ] T-VWX-010B

WASTEWATER REPORTS

[ ] T-VWX-011 [ ] T-VWX-012 [ ] T-VWX-013

GROUNDWATER REPORTS

[ ] VWX-015(A,B) [ ] VWX-016 [ ] VWX-017

NPDES DISCHARGE MONITORING REPORT

[ ] EPA FORM 3320-1

OPERATING EXCEPTIONS

	YES	NO
DYE TESTING	☐	☐
TEMPORARY BYPASSING	☐	☐
DISINFECTION INTERRUPTION	☐	☐
MONITORING MALFUNCTIONS	☐	☐
UNITS OUT OF OPERATION	☐	☐
OTHER	☐	☐

(Detail any "Yes" on reverse side in appropriate space.)

***NOTE:** The "Hours Attended at Plant" on the reverse of this sheet must also be completed.*

AUTHENTICATION - I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

LICENSED OPERATOR

Name *(Printed)* Phil Habrukowich

Grade & Registry No. NJ S-4 #3972

Signature Phil Habrukowich

Date 6/25/93

PRINCIPAL EXECUTIVE OFFICER or DULY AUTHORIZED REPRESENTATIVE

Name *(Printed)* Carmine T. Perrapato

Title *(Printed)* Executive Director

Signature

Date 6/25/93

946430046

Passaic Valley
Sewerage Commissioners

600 WILSON AVENUE
NEWARK, N.J. 07105
(201) 344-1800
Fax: (201) 344-2951

This domestic wastewater sludge report represents dewatered cake which originated from our Zimpro process.

946430047

7-VWX-007
5/89

New Jersey Department of Environmental Protection
Division of Water Resources

DOMESTIC WASTEWATER SLUDGE REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY		
0 0 2 1 0 1 6	0 5	1 9 9 3	5	1	Page 1 of 2

FACILITY NAME: Passaic Valley Sewerage Commissioners

A. REPORTING CATEGORY INFORMATION

1. Permitted Wastewater Flow	(MGD)	A1:	330.0
2. Industrial Conribution	(% of influent)	A2:	18.
3. Average Daily Septage Treated	(Gallons/Day)	A3:	3097.

B. INFORMATION ON SLUDGE PRODUCED IN TREATMENT PROCESS

1. Average Total Solids of Sludge	(% by weight)	B1:	60.9
2. Average Daily Sludge Production	(Gallons/Day)	B2:	44221.
3. Average Daily Sludge Production	(Dry Tons/Day	B3:	112.21

**C. INFORMATION ON SLUDGE REMOVED FOR ULTIMATE MANAGEMENT

1. Complete ONLY If Liquid Sludge Is Removed			
a. Total Solids of Liquid Sludge	(% by weight)	C1:	
b. Average Daily Sludge Removal	(Gallons/Day	C2:	
2. Complete ONLY If Dewatered Sludge Is Removed			
a. Total Solids of Dewatered Sludge	(% by weight)	C3:	60.9
b. Complete ONE of the following:			
i. Average Daily Sludge Removal	(Gallons/Day)	C4:	
Total Solids of 2.b.i.	(% by weight)	C5:	
ii. Average Daily Sludge Removal	(Wet Cu. Yds/Day)	C6:	
iii. Average Daily Sludge Removal	(Wet Tons/Day)	C7:	184.3
3. Total Average Daily Sludge Removal	(Dry Tons/Day)	C8:	112.21
4. pH of Sludge Removed	(Standard Units)	C9:	5.2

D. ULTIMATE SLUDGE MANAGEMENT SITE (See Codes on Reverse)

METHOD CODE	HAULER REGISTRY	FACILITY/OPERATION	PERMIT NO.
5	17244	OUT OF STATE	

E. PATHOGEN REDUCTION INFORMATION (See Codes and Complete Reverse)

METHOD CODE	FACILITY/OPERATION	PERMIT NO.	FOR DEP USE ONLY PSRP	FOR DEP USE ONLY PFRP
E	PASSAIC VALLEY	0021016		

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli	Chief Chemist		6/21/93
Name of Authorized Agent (Print)	Title	Signature	Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07250

946430048

PATHOGEN REDUCTION METHOD CODE (Appropriate sections must be completed)

A. Anaerobic Digestion; or

B. Aerobic Digestion; complete the following:

		UNIT 1	UNIT 2	UNIT 3
1. Percent Volatile Solids:				
a. Before Stabilization	(as weight % of TS)	__.__	__.__	__.__
b. After Stabilization	(as weight % of TS)	__.__	__.__	__.__
c. Percent Reduction	(see equation)	__.__	__.__	__.__
2. Detention Time	(Days)	____	____	____
3. Average Temperature	(Degrees C)	__.__	__.__	__.__

C. Air Drying (Report on any beds emptied for the report period)

BED	DATE SLUDGE LOADED Month	Day	Year	DEPTH POURED Inches	DATE SLUDGE REMOVED Month	Day	Year
1.	__	__	____	__	__	__	____
2.	__	__	____	__	__	__	____
3.	__	__	____	__	__	__	____
4.	__	__	____	__	__	__	____
5.	__	__	____	__	__	__	____

D. State Approved Lime Stabilization
E. Thermal Treatment/Drying
F. Phragmites
G. Composting
H. Other (specify here: _____)
I. None

ULTIMATE SLUDGE MANAGEMENT METHOD CODE

1. Land Application at a NJPDES Permitted Site
2. State Approved Distribution Permit
3. Incineration
4. Ocean Disposal
5. Out of State
6. Residual Not Classified as Sludge, Managed by Hazardous or Waste Flow Regs.
7. Other (specify here: _____)
8. None Removed

EQUATIONS

A. $\text{Dry Tons} = \frac{\text{Gallons (wet) X Solid Content (of the gallons)}}{240}$

B. $\text{Dry Tons} = \frac{\text{Cubic Yards (wet) X Solid Content (of the cubic yards)}}{(Y)}$

y = 1.185 where solid content is less than 15%
= 1.265 where solid content is 16% to 23%
= 1.58 where solid content is 24% to 29%
= 1.9 where solid content is greater than 30%

C. Dry Tons = Tons (wet) X Solid Content (of the wet tons)

D. $\text{Volatile Solids Reduction} = \frac{\text{VS before X VS after}}{\text{VX before} - (\text{VS before X VS after})} \times 100$

NOTE: The total and volatile solid contents in the above equations must be expressed as a decimal, for example:

1% Total Solids = .01
20% Total Solids = .20

Alternative equations may be utilized if approved in writing by NJDEP.

946430049

New Jersey Department of Environmental Protection
Division of Water Resources

METALS AND SELECTED CHEMICAL PARAMETERS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY
0 0 2 1 0 1 6	0 4	1 9 9 3	5 2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Filter Press (Wet Air Oxidized) Sludge

PARAMETER	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Metals			
Arsenic	01002	2.93	
Beryllium	01012	0.85	*
Cadmium	61527	1.915	
Chromium	61512	6.114.0	
Copper	61506	16.01	
Iron	01045	10.140.	
Lead	61503	4.845	
Mercury	01260	2.33	
Molybdenum	01062	1.98	
Nickel	61515	8.620	3
Selenium	61518	3.53	
Zinc	61509	11.31	
Selected Chemical			
Total Nitrogen	00625	68.603	
Ammonia Nitrogen	71845	23.32	
Nitrate Nitrogen	71850	3.90	
Oil and Grease	00550	17.055.6	
Phenols	46000	1.23.88	
Phosphorus	00665	12.000.	
Calcium	00916	16.338	
Magnesium	00927	3.08.6	
Potassium	00937	10.40.	
Cyanide	00720	6.28	
Fluoride	00951	1.18.	
Chloride	00940	4.0.	*

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli — Name of Authorized Agent (Print)
Chief Chemist — Title
Signature
6/18/93 — Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07407

946430050

T-WX-009
5/89

New Jersey Department of Environmental Protection
Division of Water Resources

TOXIC ORGANIC COMPOUNDS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	Yr.	REPORTING CATEGORY
0 0 2 1 0 1 6	0 5	1 9 9 3	5 2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Filter Pressed (Wet Air Oxidized) Sludge

PARAMETER	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Pesticides and			
Aldrin	39330	0.087	*
Chlordane	39350	1.24	*
Dieldrin	39380	0.099	*
DDT	39370	0.522	*
Heptachlor	39410	0.037	*
Lindane	39782	0.122	*
PCB's	39516	6.22	*
Toxaphene	39400	1.24	*
Purgeables			
Benzene	34030	0.130	
Carbon tetrachloride	32102	0.041	*
Chloroform	32106	0.041	*
Methylene Chloride	34423	0.041	*
Tetrachloroethylene	34475	0.120	*
Trichloroethylene	39180	0.041	*
Vinyl chloride	39175	0.082	*
Base/Neutrals and Acids			
Benzidine	39120	1.63	*
Benzo(a)pyrene	34247	0.326	*
Bis(2-ethylhexyl) phthalate	39100	1.49	
Hexachlorobenzene	39700	0.326	*
Hexachlorobutadiene	39702	0.326	*
N-nitrosodimethylamine	34438	0.652	*

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli — Name of Authorized Agent (Print)
Chief Chemist, PVSC — Title
Signature
6/18/93 — Date

Laboratory Name: Priority One Testing Laboratory
Cert No. 09399

946430051

600 WILSON AVENUE
NEWARK, N.J. 07105
(201) 344-1800
Fax: (201) 344-2951

This domestic wastewater sludge report represents dewatered cake which has been centrifuged and lime stabilized.

946430052

T-VWX-007
.5/89

New Jersey Department of Environmental Protection
Division of Water Resources

DOMESTIC WASTEWATER SLUDGE REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY		Page
0 0 2 1 0 1 6	0 5	1 9 9 3	5	1	2 of 2

FACILITY NAME: Passaic Valley Sewerage Commissioners

A. REPORTING CATEGORY INFORMATION

1. Permitted Wastewater Flow	(MGD)	A1:	330.0
2. Industrial Conribution	(% of influent)	A2:	18
3. Average Daily Septage Treated	(Gallons/Day)	A3:	3097

B. INFORMATION ON SLUDGE PRODUCED IN TREATMENT PROCESS

1. Average Total Solids of Sludge	(% by weight)	B1:	4.66
2. Average Daily Sludge Production	(Gallons/Day)	B2:	392,84
3. Average Daily Sludge Production	(Dry Tons/Day	B3:	76.23

**C. INFORMATION ON SLUDGE REMOVED FOR ULTIMATE MANAGEMENT

1. Complete ONLY If Liquid Sludge Is Removed			
a. Total Solids of Liquid Sludge	(% by weight)	C1:	
b. Average Daily Sludge Removal	(Gallons/Day	C2:	
2. Complete ONLY If Dewatered Sludge Is Removed			
a. Total Solids of Dewatered Sludge	(% by weight)	C3:	4.66
b. Complete ONE of the following:			
i. Average Daily Sludge Removal	(Gallons/Day)	C4:	
Total Solids of 2.b.i.	(% by weight)	C5:	
ii. Average Daily Sludge Removal	(Wet Cu. Yds/Day)	C6:	
iii. Average Daily Sludge Removal	(Wet Tons/Day)	C7:	163.7
3. Total Average Daily Sludge Removal	(Dry Tons/Day)	C8:	76.23
4. pH of Sludge Removed	(Standard Units)	C9:	11.3

D. ULTIMATE SLUDGE MANAGEMENT SITE (See Codes on Reverse)

METHOD CODE	HAULER REGISTRY	FACILITY/OPERATION	PERMIT NO.
5	17244	OUT OF STATE	

E. PATHOGEN REDUCTION INFORMATION (See Codes and Complete Reverse)

METHOD CODE	FACILITY/OPERATION	PERMIT NO.	FOR DEP USE ONLY PSRP	FOR DEP USE ONLY PFRP
D	PASSAIC VALLEY	0021016		

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli	Chief Chemist		6/21/93
Name of Authorized Agent (Print)	Title	Signature	Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07250

946430053

PATHOGEN REDUCTION METHOD CODE (Appropriate sections must be completed)

A. Anaerobic Digestion; or

B. Aerobic Digestion; complete the following:

		UNIT 1	UNIT 2	UNIT 3
1. Percent Volatile Solids:				
a. Before Stabilization	(as weight % of TS)	____	____	____
b. After Stabilization	(as weight % of TS)	____	____	____
c. Percent Reduction	(see equation)	____	____	____
2. Detention Time	(Days)	___	___	___
3. Average Temperature	(Degrees C)	____	____	____

C. Air Drying (Report on any beds emptied for the report period)

BED	DATE SLUDGE LOADED Month	Day	Year	DEPTH POURED Inches	DATE SLUDGE REMOVED Month	Day	Year
1.	__	__	____	__	__	__	____
2.	__	__	____	__	__	__	____
3.	__	__	____	__	__	__	____
4.	__	__	____	__	__	__	____
5.	__	__	____	__	__	__	____

D. State Approved Lime Stabilization
E. Thermal Treatment/Drying
F. Phragmites
G. Composting
H. Other (specify here: _____)
I. None

ULTIMATE SLUDGE MANAGEMENT METHOD CODE

1. Land Application at a NJPDES Permitted Site
2. State Approved Distribution Permit
3. Incineration
4. Ocean Disposal
5. Out of State
6. Residual Not Classified as Sludge, Managed by Hazardous or Waste Flow Regs.
7. Other (specify here: _____)
8. None Removed

EQUATIONS

A. $\text{Dry Tons} = \frac{\text{Gallons (wet) X Solid Content (of the gallons)}}{240}$

B. $\text{Dry Tons} = \frac{\text{Cubic Yards (wet) X Solid Content (of the cubic yards)}}{(Y)}$

y = 1.185 where solid content is less than 15%
= 1.265 where solid content is 16% to 23%
= 1.58 where solid content is 24% to 29%
= 1.9 where solid content is greater than 30%

C. Dry Tons = Tons (wet) X Solid Content (of the wet tons)

D. $\text{Volatile Solids Reduction} = \frac{\text{VS before X VS after}}{\text{VX before— (VS before X VS after)}} \times 100$

NOTE: The total and volatile solid contents in the above equations must be expressed as a decimal, for example:

1% Total Solids = .01
20% Total Solids = .20

Alternative equations may be utilized if approved in writing by NJDEP.

946430054

New Jersey Department of Environmental Protection
Division of Water Resources

METALS AND SELECTED CHEMICAL PARAMETERS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	Yr.	REPORTING CATEGORY
0 0 2 1 0 1 6	0 4	1 9 9 3	5 2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Centrifuged (Lime Stabilized) Sludge

PARAMETER	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Metals			
Arsenic	01002	180	
Beryllium	01012	064	*
Cadmium	61527	1110	
Chromium	61512	2470	
Copper	61506	5675 5	
Iron	01045	3130	
Lead	61503	2415	
Mercury	01260	082	
Molybdenum	01062	189	
Nickel	61515	4675	
Selenium	61518	219	
Zinc	61509	489	
Selected Chemical			
Total Nitrogen	00625	12505 4	
Ammonia Nitrogen	71845	2644	
Nitrate Nitrogen	71850	380	
Oil and Grease	00550	4804 3	
Phenols	46000	1127	
Phosphorus	00665	5250	
Calcium	00916	12950 0	
Magnesium	00927	2160	
Potassium	00937	1019	
Cyanide	00720	2387	
Fluoride	00951	268	
Chloride	00940	1090 0	

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli	Chief Chemist		6/18/93
Name of Authorized Agent (Print)	Title	Signature	Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07407

946430055

TOXIC ORGANIC COMPOUNDS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	Yr.	REPORTING CATEGORY
0 0 2 1 0 1 6	0 5	1 9 9 3	5 2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Centrifuged (Lime Stabilized) Sludge

PARAMETER	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Pesticides and			
Aldrin	39330	0.007	*
Chlordane	39350	0.107	*
Dieldrin	39380	0.009	*
DDT	39370	0.045	*
Heptachlor	39410	0.003	*
Lindane	39782	0.010	*
PCB's	39516	0.535	*
Toxaphene	39400	1.07	*
Purgeables			
Benzene	34030	0.056	*
Carbon tetrachloride	32102	0.056	*
Chloroform	32106	0.056	*
Methylene Chloride	34423	0.056	*
Tetrachloroethylene	34475	0.153	
Trichloroethylene	39180	0.056	*
Vinyl chloride	39175	0.122	*
Base/Neutrals and Acids			
Benzidine	39120	0.369	*
Benzo(a)pyrene	34247	0.074	*
Bis(2-ethylhexyl) phthalate	39100	2.95	
Hexachlorobenzene	39700	0.074	*
Hexachlorobutadiene	39702	0.074	*
N-nitrosodimethylamine	34438	0.148	*

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli — Name of Authorized Agent (Print)
Chief Chemist, PVSC — Title
[signature] — Signature
6/18/93 — Date

Laboratory Name: Priority One Testing Laboratory
Cert No. 09399

946430056

MONITORING REPORT – TRANSMITTAL SHEET

NJPDES NO.	REPORTING PERIOD MO. YR.		MO. YR.
0 0 2 1 0 1 6	0 6 9 3	THRU	0 6 9 3

PERMITTEE:
Name Passaic Valley Sewerage Commissioners
Address 600 Wilson Avenue
Newark, New Jersey 07105

FACILITY:
Name Passaic Valley Sewerage Commissioners
Address 600 Wilson Avenue
Newark, N.J. 07105 (County) Essex
Telephone (201) 344-1800

* For reporting period 6/93
** For reporting period 5/93

FORMS ATTACHED *(Indicate Quantity of Each)*

SLUDGE REPORTS - SANITARY

[1]* T-VWX-007 [1]** T-VWX-008 [1]* T-VWX-009

SLUDGE REPORTS - INDUSTRIAL

[ ] T-VWX-010A [ ] T-VWX-010B

WASTEWATER REPORTS

[ ] T-VWX-011 [ ] T-VWX-012 [ ] T-VWX-013

GROUNDWATER REPORTS

[ ] VWX-015(A,B) [ ] VWX-016 [ ] VWX-017

NPDES DISCHARGE MONITORING REPORT

[ ] EPA FORM 3320-1

OPERATING EXCEPTIONS

	YES	NO
DYE TESTING	☐	☐
TEMPORARY BYPASSING	☐	☐
DISINFECTION INTERRUPTION	☐	☐
MONITORING MALFUNCTIONS	☐	☐
UNITS OUT OF OPERATION	☐	☐
OTHER	☐	☐

(Detail any "Yes" on reverse side in appropriate space.)

***NOTE:** The "Hours Attended at Plant" on the reverse of this sheet must also be completed.*

AUTHENTICATION - I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

LICENSED OPERATOR

Name *(Printed)* Phil Habrukowich
Grade & Registry No. NJ S-4 #3972
Signature Phil Habrukowich
Date 7/23/93

PRINCIPAL EXECUTIVE OFFICER or DULY AUTHORIZED REPRESENTATIVE

Name *(Printed)* Carmine T. Perrapato
Title *(Printed)* Executive Director
Signature
Date 7/23/93

946430057

Passaic Valley
Sewerage Commissioners

600 WILSON AVENUE
NEWARK, N.J. 07105
(201) 344-1800
Fax: (201) 344-2951

This domestic wastewater sludge report represents dewatered cake which originated from our Zimpro process.

946430058

T-VWX-007
5/89

New Jersey Department of Environmental Protection
Division of Water Resources

DOMESTIC WASTEWATER SLUDGE REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY		
0021016	06	1993	5	1	Page 1 of 2

FACILITY NAME: Passaic Valley Sewerage Commissioners

A. REPORTING CATEGORY INFORMATION

1. Permitted Wastewater Flow	(MGD)	A1:	330.0
2. Industrial Conribution	(% of influent)	A2:	18.
3. Average Daily Septage Treated	(Gallons/Day)	A3:	3067

B. INFORMATION ON SLUDGE PRODUCED IN TREATMENT PROCESS

1. Average Total Solids of Sludge	(% by weight)	B1:	59.8
2. Average Daily Sludge Production	(Gallons/Day)	B2:	31094
3. Average Daily Sludge Production	(Dry Tons/Day	B3:	77.51

**C. INFORMATION ON SLUDGE REMOVED FOR ULTIMATE MANAGEMENT

1. Complete ONLY If Liquid Sludge Is Removed			
a. Total Solids of Liquid Sludge	(% by weight)	C1:	
b. Average Daily Sludge Removal	(Gallons/Day	C2:	
2. Complete ONLY If Dewatered Sludge Is Removed			
a. Total Solids of Dewatered Sludge	(% by weight)	C3:	59.8
b. Complete ONE of the following:			
i. Average Daily Sludge Removal	(Gallons/Day)	C4:	
Total Solids of 2.b.i.	(% by weight)	C5:	
ii. Average Daily Sludge Removal	(Wet Cu. Yds/Day)	C6:	
iii. Average Daily Sludge Removal	(Wet Tons/Day)	C7:	129.6
3. Total Average Daily Sludge Removal	(Dry Tons/Day)	C8:	77.51
4. pH of Sludge Removed	(Standard Units)	C9:	5.7

D. ULTIMATE SLUDGE MANAGEMENT SITE (See Codes on Reverse)

METHOD CODE	HAULER REGISTRY	FACILITY/OPERATION	PERMIT NO.
5	17244	OUT OF STATE	

E. PATHOGEN REDUCTION INFORMATION (See Codes and Complete Reverse)

METHOD CODE	FACILITY/OPERATION	PERMIT NO.	FOR DEP USE ONLY PSRP	FOR DEP USE ONLY PFRP
E	PASSAIC VALLEY	0021016		

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli	Chief Chemist		July 13, 1993
Name of Authorized Agent (Print)	Title	Signature	Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07250

946430059

PATHOGEN REDUCTION METHOD CODE **(Appropriate sections must be completed)**

A. Anaerobic Digestion: or

B. Aerobic Digestion: complete the following:

		UNIT 1	UNIT 2	UNIT 3
1. Percent Volatile Solids:				
a. Before Stabilization	(as weight % of TS)	___._	__._	__._
b. After Stabilization	(as weight % of TS)	__._	__._	__._
c. Percent Reduction	(see equation)	__._	__._	__._
2. Detention Time	(Days)	___	___	___
3. Average Temperature	(Degrees C)	__._	__._	__._

C. Air Drying (Report on any beds emptied for the report period)

BED	DATE SLUDGE LOADED Month	Day	Year	DEPTH POURED Inches	DATE SLUDGE REMOVED Month	Day	Year
1.	__	__	____	__	__	__	____
2.	__	__	____	__	__	__	____
3.	__	__	____	__	__	__	____
4.	__	__	____	__	__	__	____
5.	__	__	____	__	__	__	____

D. State Approved Lime Stabilization
E. Thermal Treatment/Drying
F. Phragmites
G. Composting
H. Other (specify here: _____)
I. None

ULTIMATE SLUDGE MANAGEMENT METHOD CODE

1. Land Application at a NJPDES Permitted Site
2. State Approved Distribution Permit
3. Incineration
4. Ocean Disposal
5. Out of State
6. Residual Not Classified as Sludge, Managed by Hazardous or Waste Flow Regs.
7. Other (specify here: _____)
8. None Removed

EQUATIONS

A. $\text{Dry Tons} = \frac{\text{Gallons (wet) X Solid Content (of the gallons)}}{240}$

B. $\text{Dry Tons} = \frac{\text{Cubic Yards (wet) X Solid Content (of the cubic yards)}}{(Y)}$

y = 1.185 where solid content is less than 15%
= 1.265 where solid content is 16% to 23%
= 1.58 where solid content is 24% to 29%
= 1.9 where solid content is greater than 30%

C. Dry Tons = Tons (wet) X Solid Content (of the wet tons)

D. $\text{Volatile Solids Reduction} = \frac{\text{VS before X VS after}}{\text{VX before} - (\text{VS before X VS after})} \times 100$

NOTE: The total and volatile solid contents in the above equations must be expressed as a decimal, for example:

1% Total Solids = .01
20% Total Solids = .20

Alternative equations may be utilized if approved in writing by NJDEP.

946430060

New Jersey Department of Environmental Protection
Division of Water Resources

METALS AND SELECTED CHEMICAL PARAMETERS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY
0 0 2 1 0 1 6	0 5	1 9 9 3	5 2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Filter Press (Wet Air Oxidized) Sludge)

PARAMETER	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Metals			
Arsenic	01002	224	*
Beryllium	01012	018	*
Cadmium	61527	2045	
Chromium	61512	6391 5	
Copper	61506	1657	
Iron	01045	1070 0	
Lead	61503	382	
Mercury	01260	269	
Molybdenum	01062	560	*
Nickel	61515	9155	
Selenium	61518	28	*
Zinc	61509	1396	
Selected Chemical			
Total Nitrogen	00625	61399	
Ammonia Nitrogen	71845	1140	
Nitrate Nitrogen	71850	620	
Oil and Grease	00550	16830 9	
Phenols	46000	7414	
Phosphorus	00665	27000	
Calcium	00916	15244	
Magnesium	00927	3082	
Potassium	00937	700	
Cyanide	00720	125	
Fluoride	00951	977	
Chloride	00940	131	

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli — Name of Authorized Agent (Print)
Chief Chemist — Title
Arthur A. Martinelli — Signature
July 14, 1993 — Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07407

946430061

T-VWX-009
5/89

New Jersey Department of Environmental Protection
Division of Water Resources

TOXIC ORGANIC COMPOUNDS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY
0 0 2 1 0 1 6	0 6	1 9 9 3	5 2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Filter Pressed (Wet Air Oxidized) Sludge

PARAMETER	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Pesticides and			
Aldrin	39330	0.109	*
Chlordane	39350	1.55	*
Dieldrin	39380	0.124	*
DDT	39370	0.652	*
Heptachlor	39410	0.047	*
Lindane	39782	0.140	*
PCB's	39516	7.76	*
Toxaphene	39400	1.55	*
Purgeables			
Benzene	34030	0.039	*
Carbon tetrachloride	32102	0.039	*
Chloroform	32106	0.039	*
Methylene Chloride	34423	0.039	*
Tetrachloroethylene	34475	0.096	
Trichloroethylene	39180	0.039	*
Vinyl chloride	39175	0.077	*
Base/Neutrals and Acids			
Benzidine	39120	3.43	*
Benzo(a)pyrene	34247	6.86	*
Bis(2-ethylhexyl) phthalate	39100	182.	
Hexachlorobenzene	39700	6.86	*
Hexachlorobutadiene	39702	6.86	*
N-nitrosodimethylamine	34438	1.37	*

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli — Name of Authorized Agent (Print)
Chief Chemist, PVSC — Title
Signature
July 13, 1993 — Date

Laboratory Name: Priority One Testing Laboratory
Cert No. 09399

946430062

Passaic Valley
Sewerage Commissioners

600 WILSON AVENUE
NEWARK, N.J. 07105
(201) 344-1800
Fax: (201) 344-2951

This domestic wastewater sludge report represents dewatered cake which has been centrifuged and lime stabilized.

946430063

T-VWX-007
5/89

New Jersey Department of Environmental Protection
Division of Water Resources

DOMESTIC WASTEWATER SLUDGE REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY		
0021016	06	1993	5	1	Page 2 of 2

FACILITY NAME: Passaic Valley Sewerage Commissioners

A. REPORTING CATEGORY INFORMATION

1. Permitted Wastewater Flow	(MGD)	A1:	33.00
2. Industrial Conribution	(% of influent)	A2:	18
3. Average Daily Septage Treated	(Gallons/Day)	A3:	3067

B. INFORMATION ON SLUDGE PRODUCED IN TREATMENT PROCESS

1. Average Total Solids of Sludge	(% by weight)	B1:	4.64
2. Average Daily Sludge Production	(Gallons/Day)	B2:	79962
3. Average Daily Sludge Production	(Dry Tons/Day	B3:	1544.45

**C. INFORMATION ON SLUDGE REMOVED FOR ULTIMATE MANAGEMENT

1. Complete ONLY If Liquid Sludge Is Removed			
a. Total Solids of Liquid Sludge	(% by weight)	C1:	
b. Average Daily Sludge Removal	(Gallons/Day	C2:	
2. *Complete ONLY If Dewatered Sludge Is Removed*			
a. Total Solids of Dewatered Sludge	(% by weight)	C3:	4.64
b. Complete ONE of the following:			
i. Average Daily Sludge Removal	(Gallons/Day)	C4:	
Total Solids of 2.b.i.	(% by weight)	C5:	
ii. Average Daily Sludge Removal	(Wet Cu. Yds/Day)	C6:	
iii. Average Daily Sludge Removal	(Wet Tons/Day)	C7:	3332
3. Total Average Daily Sludge Removal	(Dry Tons/Day)	C8:	1544.45
4. pH of Sludge Removed	(Standard Units)	C9:	11.0

D. ULTIMATE SLUDGE MANAGEMENT SITE (See Codes on Reverse)

METHOD CODE	HAULER REGISTRY	FACILITY/OPERATION	PERMIT NO.
5	17244	OUT OF STATE	

E. PATHOGEN REDUCTION INFORMATION (See Codes and Complete Reverse)

METHOD CODE	FACILITY/OPERATION	PERMIT NO.	FOR DEP USE ONLY PSRP	FOR DEP USE ONLY PFRP
D	PASSAIC VALLEY	0021016		

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli	Chief Chemist		July 13, 1993
Name of Authorized Agent (Print)	Title	Signature	Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07250

946430064

PATHOGEN REDUCTION METHOD CODE **(Appropriate sections must be completed)**

A. Anaerobic Digestion; or

B. Aerobic Digestion; complete the following:

		UNIT 1	UNIT 2	UNIT 3
1. Percent Volatile Solids:				
a. Before Stabilization	(as weight % of TS)	____	____	____
b. After Stabilization	(as weight % of TS)	____	____	____
c. Percent Reduction	(see equation)	____	____	____
2. Detention Time	(Days)	____	____	____
3. Average Temperature	(Degrees C)	____	____	____

C. Air Drying (Report on any beds emptied for the report period)

BED	DATE SLUDGE LOADED Month	Day	Year	DEPTH POURED Inches	DATE SLUDGE REMOVED Month	Day	Year
1.	__	__	____	__	__	__	____
2.	__	__	____	__	__	__	____
3.	__	__	____	__	__	__	____
4.	__	__	____	__	__	__	____
5.	__	__	____	__	__	__	____

D. State Approved Lime Stabilization

E. Thermal Treatment/Drying

F. Phragmites

G. Composting

H. Other (specify here: _____)

I. None

ULTIMATE SLUDGE MANAGEMENT METHOD CODE

1. Land Application at a NJPDES Permitted Site
2. State Approved Distribution Permit
3. Incineration
4. Ocean Disposal
5. Out of State
6. Residual Not Classified as Sludge, Managed by Hazardous or Waste Flow Regs.
7. Other (specify here: _____)
8. None Removed

EQUATIONS

A. $\text{Dry Tons} = \frac{\text{Gallons (wet) X Solid Content (of the gallons)}}{240}$

B. $\text{Dry Tons} = \frac{\text{Cubic Yards (wet) X Solid Content (of the cubic yards)}}{(Y)}$

y = 1.185 where solid content is less than 15%
= 1.265 where solid content is 16% to 23%
= 1.58 where solid content is 24% to 29%
= 1.9 where solid content is greater than 30%

C. Dry Tons = Tons (wet) X Solid Content (of the wet tons)

D. $\text{Volatile Solids Reduction} = \frac{\text{VS before X VS after}}{\text{VX before} - (\text{VS before X VS after})} \times 100$

NOTE: The total and volatile solid contents in the above equations must be expressed as a decimal, for example:

1% Total Solids = .01
20% Total Solids = .20

Alternative equations may be utilized if approved in writing by NJDEP.

946430065

METALS AND SELECTED CHEMICAL PARAMETERS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY
0 0 2 1 0 1 6	0 5	1 9 9 3	5 2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Centrifuged (Lime Stabilized) Sludge

PARAMETER	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Metals			
Arsenic	01002	299	*
Beryllium	01012	015	*
Cadmium	61527	980	
Chromium	61512	1824 0	
Copper	61506	428	
Iron	01045	2630	
Lead	61503	154	
Mercury	01260	111	
Molybdenum	01062	746	*
Nickel	61515	4140	
Selenium	61518	38	*
Zinc	61509	452	
Selected Chemical			
Total Nitrogen	00625	981 93	
Ammonia Nitrogen	71845	1528	
Nitrate Nitrogen	71850	152	
Oil and Grease	00550	2575 1	
Phenols	46000	944	
Phosphorus	00665	4830	
Calcium	00916	1 2937 5	
Magnesium	00927	3035	
Potassium	00937	764	
Cyanide	00720	201	
Fluoride	00951	217	
Chloride	00940	3300	

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli — Name of Authorized Agent (Print)
Chief Chemist — Title
Arthur A. Martinelli — Signature
July 14, 1993 — Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07407

946430066

New Jersey Department of Environmental Protection
Division of Water Resources

TOXIC ORGANIC COMPOUNDS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY
0021016	06	1993	52

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Centrifuged (Lime Stabilized) Sludge

PARAMETER	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Pesticides and			
Aldrin	39330	0.007	*
Chlordane	39350	0.104	*
Dieldrin	39380	0.008	*
DDT	39370	0.044	*
Heptachlor	39410	0.003	*
Lindane	39782	0.009	*
PCB's	39516	0.522	*
Toxaphene	39400	1.04	*
Purgeables			
Benzene	34030	1.43	*
Carbon tetrachloride	32102	1.43	*
Chloroform	32106	1.43	*
Methylene Chloride	34423	1.43	*
Tetrachloroethylene	34475	1.43	*
Trichloroethylene	39180	1.43	*
Vinyl chloride	39175	2.86	*
Base/Neutrals and Acids			
Benzidine	39120	4.49	*
Benzo(a)pyrene	34247	0.898	*
Bis(2-ethylhexyl) phthalate	39100	6.41	
Hexachlorobenzene	39700	0.898	*
Hexachlorobutadiene	39702	0.898	*
N-nitrosodimethylamine	34438	1.80	*

CERTIFICATE OF AUTHENTICITY

Name of Authorized Agent (Print)	Title	Signature	Date
Arthur A.Martinelli	Chief Chemist, PVSC	Arthur A. Martinelli	July 13, 1993

Laboratory Name: Priority One Testing Laboratory Cert No. 09399

946430067

VWX-014
92

NEW JERSEY DEPT. OF ENVIRONMENTAL PROTECTION AND ENERGY

MONITORING REPORT – TRANSMITTAL SHEET

NJPDES NO.	REPORTING PERIOD MO. YR.	THRU MO. YR.
0 0 2 1 1 0 1 6	0 7 9 3	0 7 9 3

PERMITTEE: Name Passaic Valley Sewerage Commissioners

Address 600 Wilson Avenue

Newark, New Jersey 07105

FACILITY: Name Passaic Valley Sewerage Commissioners

Address 600 Wilson Avenue

Newark, N.J. 07105 (County) Essex

Telephone (201) 344-1800

* For reporting period 7/93
** For reporting period 6/93 & 7/93

FORMS ATTACHED *(Indicate Quantity of Each)*

SLUDGE REPORTS - SANITARY

[1]* T-VWX-007 [2]** T-VWX-008 [1]* T-VWX-009

SLUDGE REPORTS - INDUSTRIAL

[ ] T-VWX-010A [ ] T-VWX-010B

WASTEWATER REPORTS

[ ] T-VWX-011 [ ] T-VWX-012 [ ] T-VWX-013

GROUNDWATER REPORTS

[ ] VWX-015(A,B) [ ] VWX-016 [ ] VWX-017

NPDES DISCHARGE MONITORING REPORT

[ ] EPA FORM 3320-1

OPERATING EXCEPTIONS

	YES	NO
DYE TESTING	☐	☐
TEMPORARY BYPASSING	☐	☐
DISINFECTION INTERRUPTION	☐	☐
MONITORING MALFUNCTIONS	☐	☐
UNITS OUT OF OPERATION	☐	☐
OTHER	☐	☐

(Detail any "Yes" on reverse side in appropriate space.)

NOTE: *The "Hours Attended at Plant" on the reverse of this sheet must also be completed.*

AUTHENTICATION - I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

LICENSED OPERATOR

Name *(Printed)* Phil Habrukowich

Grade & Registry No. NJ S-4 #3972

Signature

Date 8/20/93

PRINCIPAL EXECUTIVE OFFICER or DULY AUTHORIZED REPRESENTATIVE

Name *(Printed)* Carmine T. Perrapato

Title *(Printed)* Executive Director

Signature

Date 8/24/93

946430068

Passaic Valley
Sewerage Commissioners

600 WILSON AVENUE
NEWARK, N.J. 07105
(201) 344-1800
Fax: (201) 344-2951

This domestic wastewater sludge report represents dewatered cake which originated from our Zimpro process.

946430069

T-VWX-007
5/89

New Jersey Department of Environmental Protection
Division of Water Resources

DOMESTIC WASTEWATER SLUDGE REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY		
0 0 2 1 0 1 6	0 7	1 9 9 3	5	1	Page 1 of 2

FACILITY NAME: Passaic Valley Sewerage Commissioners

A. REPORTING CATEGORY INFORMATION

1. Permitted Wastewater Flow	(MGD)	A1:	330.0
2. Industrial Conribution	(% of influent)	A2:	18.
3. Average Daily Septage Treated	(Gallons/Day)	A3:	2355

B. INFORMATION ON SLUDGE PRODUCED IN TREATMENT PROCESS

1. Average Total Solids of Sludge	(% by weight)	B1:	5.97
2. Average Daily Sludge Production	(Gallons/Day)	B2:	24880
3. Average Daily Sludge Production	(Dry Tons/Day	B3:	61.85

**C. INFORMATION ON SLUDGE REMOVED FOR ULTIMATE MANAGEMENT

1. Complete ONLY If Liquid Sludge Is Removed			
a. Total Solids of Liquid Sludge	(% by weight)	C1:	
b. Average Daily Sludge Removal	(Gallons/Day	C2:	
2. Complete ONLY If Dewatered Sludge Is Removed			
a. Total Solids of Dewatered Sludge	(% by weight)	C3:	5.97
b. Complete ONE of the following:			
i. Average Daily Sludge Removal	(Gallons/Day)	C4:	
Total Solids of 2.b.i.	(% by weight)	C5:	
ii. Average Daily Sludge Removal	(Wet Cu. Yds/Day)	C6:	
iii. Average Daily Sludge Removal	(Wet Tons/Day)	C7:	103.7
3. Total Average Daily Sludge Removal	(Dry Tons/Day)	C8:	61.85
4. pH of Sludge Removed	(Standard Units)	C9:	5.5

D. ULTIMATE SLUDGE MANAGEMENT SITE (See Codes on Reverse)

METHOD CODE	HAULER REGISTRY	FACILITY/OPERATION	PERMIT NO.
5	17244	OUT OF STATE	

E. PATHOGEN REDUCTION INFORMATION (See Codes and Complete Reverse)

METHOD CODE	FACILITY/OPERATION	PERMIT NO.	FOR DEP USE ONLY PSRP	FOR DEP USE ONLY PFRP
E	PASSAIC VALLEY	0021016		

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli	Chief Chemist		AUG 10, 1993
Name of Authorized Agent (Print)	Title	Signature	Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07250

946430070

PATHOGEN REDUCTION METHOD CODE **(Appropriate sections must be completed)**

A. Anaerobic Digestion; or

B. Aerobic Digestion; complete the following:

		UNIT 1	UNIT 2	UNIT 3
1. Percent Volatile Solids:				
a. Before Stabilization	(as weight % of TS)	____	____	____
b. After Stabilization	(as weight % of TS)	____	____	____
c. Percent Reduction	(see equation)	____	____	____
2. Detention Time	(Days)	____	____	____
3. Average Temperature	(Degrees C)	____	____	____

C. Air Drying (Report on any beds emptied for the report period)

BED	DATE SLUDGE LOADED Month	Day	Year	DEPTH POURED Inches	DATE SLUDGE REMOVED Month	Day	Year
1.	__	__	____	__	__	__	____
2.	__	__	____	__	__	__	____
3.	__	__	____	__	__	__	____
4.	__	__	____	__	__	__	____
5.	__	__	____	__	__	__	____

D. State Approved Lime Stabilization
E. Thermal Treatment/Drying
F. Phragmites
G. Composting
H. Other (specify here: _____)
I. None

ULTIMATE SLUDGE MANAGEMENT METHOD CODE

1. Land Application at a NJPDES Permitted Site
2. State Approved Distribution Permit
3. Incineration
4. Ocean Disposal
5. Out of State
6. Residual Not Classified as Sludge, Managed by Hazardous or Waste Flow Regs.
7. Other (specify here: _____)
8. None Removed

EQUATIONS

A. $\text{Dry Tons} = \frac{\text{Gallons (wet) X Solid Content (of the gallons)}}{240}$

B. $\text{Dry Tons} = \frac{\text{Cubic Yards (wet) X Solid Content (of the cubic yards)}}{(Y)}$

y = 1.185 where solid content is less than 15%
= 1.265 where solid content is 16% to 23%
= 1.58 where solid content is 24% to 29%
= 1.9 where solid content is greater than 30%

C. Dry Tons = Tons (wet) X Solid Content (of the wet tons)

D. $\text{Volatile Solids Reduction} = \frac{\text{VS before X VS after}}{\text{VX before} - (\text{VS before X VS after})} \times 100$

NOTE: The total and volatile solid contents in the above equations must be expressed as a decimal, for example:

1% Total Solids = .01
20% Total Solids = .20

Alternative equations may be utilized if approved in writing by NJDEP.

946430071

New Jersey Department of Environmental Protection
Division of Water Resources

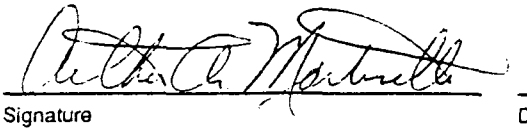
METALS AND SELECTED CHEMICAL PARAMETERS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY
0 0 2 1 0 1 6	0 6	1 9 9 3	5 2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Filter Press (Wet Air Oxidized) Sludge)

PARAMETER	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Metals			
Arsenic	01002	2.77	*
Beryllium	01012	0.70	*
Cadmium	61527	2.790	
Chromium	61512	73.35	
Copper	61506	17.28	
Iron	01045	114.00	
Lead	61503	79.7	
Mercury	01260	2.74	
Molybdenum	01062	2.04	
Nickel	61515	11.855	
Selenium	61518	5.53	*
Zinc	61509	216.3	
Selected Chemical			
Total Nitrogen	00625	1276.6	
Ammonia Nitrogen	71845	83.3	
Nitrate Nitrogen	71850	2.10	
Oil and Grease	00550	171405	
Phenols	46000	6.03	
Phosphorus	00665	175.00	
Calcium	00916	1638.1	
Magnesium	00927	370.2	
Potassium	00937	74.5	
Cyanide	00720	5.85	
Fluoride	00951	1.31	
Chloride	00940	63.6	

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli — Name of Authorized Agent (Print)
Chief Chemist — Title
 — Signature
JUL 9, 1993 — Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07407

946430072

New Jersey Department of Environmental Protection
Division of Water Resources

METALS AND SELECTED CHEMICAL PARAMETERS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY
0 0 2 1 0 1 6	0 7	1 9 9 3	5 2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Filter Press (Wet Air Oxidized) Sludge)

PARAMETER	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Metals			
Arsenic	01002	3.13	
Beryllium	01012	0.59	
Cadmium	61527	3.335	
Chromium	61512	56.725	
Copper	61506	16.53	
Iron	01045	122.00	
Lead	61503	71.45	
Mercury	01260	2.41	
Molybdenum	01062	1.55	
Nickel	61515	98.6	
Selenium	61518	1.69	
Zinc	61509	26.39	
Selected Chemical			
Total Nitrogen	00625	125.63	
Ammonia Nitrogen	71845	22.1	
Nitrate Nitrogen	71850	2.92	
Oil and Grease	00550	151.591	
Phenols	46000	6.74	
Phosphorus	00665	199.00	
Calcium	00916	143.00	
Magnesium	00927	44.99	
Potassium	00937	11.69	
Cyanide	00720	6.28	
Fluoride	00951	1.36	
Chloride	00940	8.30	*

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli	Chief Chemist		AUG 24, 1993
Name of Authorized Agent (Print)	Title	Signature	Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07407

946430074

T-VWX-009
5/89

New Jersey Department of Environmental Protection
Division of Water Resources

TOXIC ORGANIC COMPOUNDS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY
0 0 2 1 0 1 6	0 7	1 9 9 3	5 2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Filter Pressed (Wet Air Oxidized) Sludge

PARAMETER	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Pesticides and			
Aldrin	39330	1.48	*
Chlordane	39350	21.1	*
Dieldrin	39380	1.69	*
DDT	39370	8.86	*
Heptachlor	39410	0.632	*
Lindane	39782	1.90	*
PCB's	39516	105.	*
Toxaphene	39400	211.	*
Purgeables			
Benzene	34030	0.140	
Carbon tetrachloride	32102	0.041	*
Chloroform	32106	0.041	*
Methylene Chloride	34423	0.062	
Tetrachloroethylene	34475	0.083	
Trichloroethylene	39180	0.041	*
Vinyl chloride	39175	0.082	*
Base/Neutrals and Acids			
Benzidine	39120	14.5	*
Benzo(a)pyrene	34247	2.90	*
Bis(2-ethylhexyl) phthalate	39100	685.	
Hexachlorobenzene	39700	2.90	*
Hexachlorobutadiene	39702	2.90	*
N-nitrosodimethylamine	34438	5.80	*
_____	_____		
_____	_____		

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli — Name of Authorized Agent (Print)
Chief Chemist, PVSC — Title
Arthur A. Martinelli — Signature
Aug 6, 1993 — Date

Laboratory Name: Priority One Testing Laboratory
Cert No. 09399

946430075

Passaic Valley
Sewerage Commissioners

600 WILSON AVENUE
NEWARK, N.J. 07105
(201) 344-1800
Fax: (201) 344-2951

This domestic wastewater sludge report represents dewatered cake which has been centrifuged and lime stabilized.

946430076

T-VWX-007
5/89

New Jersey Department of Environmental Protection
Division of Water Resources

DOMESTIC WASTEWATER SLUDGE REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY		Page
0 0 2 1 0 1 6	0 7	1 9 9 3	5	1	2 of 2

FACILITY NAME: Passaic Valley Sewerage Commissioners

A. REPORTING CATEGORY INFORMATION

1. Permitted Wastewater Flow	(MGD)	A1:	330.0
2. Industrial Conribution	(% of influent)	A2:	18
3. Average Daily Septage Treated	(Gallons/Day)	A3:	2355

B. INFORMATION ON SLUDGE PRODUCED IN TREATMENT PROCESS

1. Average Total Solids of Sludge	(% by weight)	B1:	5.07
2. Average Daily Sludge Production	(Gallons/Day)	B2:	546636
3. Average Daily Sludge Production	(Dry Tons/Day	B3:	11552

**C. INFORMATION ON SLUDGE REMOVED FOR ULTIMATE MANAGEMENT

1. Complete ONLY If Liquid Sludge Is Removed			
a. Total Solids of Liquid Sludge	(% by weight)	C1:	
b. Average Daily Sludge Removal	(Gallons/Day	C2:	
2. Complete ONLY If Dewatered Sludge Is Removed			
a. Total Solids of Dewatered Sludge	(% by weight)	C3:	5.07
b. Complete ONE of the following:			
i. Average Daily Sludge Removal	(Gallons/Day)	C4:	
Total Solids of 2.b.i.	(% by weight)	C5:	
ii. Average Daily Sludge Removal	(Wet Cu. Yds/Day)	C6:	
iii. Average Daily Sludge Removal	(Wet Tons/Day)	C7:	2277
3. Total Average Daily Sludge Removal	(Dry Tons/Day)	C8:	11552
4. pH of Sludge Removed	(Standard Units)	C9:	11.2

D. ULTIMATE SLUDGE MANAGEMENT SITE (See Codes on Reverse)

METHOD CODE	HAULER REGISTRY	FACILITY/OPERATION	PERMIT NO.
5	17244	OUT OF STATE	

E. PATHOGEN REDUCTION INFORMATION (See Codes and Complete Reverse)

METHOD CODE	FACILITY/OPERATION	PERMIT NO.	FOR DEP USE ONLY PSRP	FOR DEP USE ONLY PFRP
D	PASSAIC VALLEY	0021016		

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli	Chief Chemist		AUG 10, 1993
Name of Authorized Agent (Print)	Title	Signature	Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07250

946430077

PATHOGEN REDUCTION METHOD CODE (Appropriate sections must be completed)

A. Anaerobic Digestion; or

B. Aerobic Digestion; complete the following:

		UNIT 1	UNIT 2	UNIT 3
1. Percent Volatile Solids:				
a. Before Stabilization	(as weight % of TS)	____	____	____
b. After Stabilization	(as weight % of TS)	____	____	____
c. Percent Reduction	(see equation)	____	____	____
2. Detention Time	(Days)	____	____	____
3. Average Temperature	(Degrees C)	____	____	____

C. Air Drying (Report on any beds emptied for the report period)

BED	DATE SLUDGE LOADED Month	Day	Year	DEPTH POURED Inches	DATE SLUDGE REMOVED Month	Day	Year
1.	__	__	____	__	__	__	____
2.	__	__	____	__	__	__	____
3.	__	__	____	__	__	__	____
4.	__	__	____	__	__	__	____
5.	__	__	____	__	__	__	____

D. State Approved Lime Stabilization
E. Thermal Treatment/Drying
F. Phragmites
G. Composting
H. Other (specify here: _____)
I. None

ULTIMATE SLUDGE MANAGEMENT METHOD CODE

1. Land Application at a NJPDES Permitted Site
2. State Approved Distribution Permit
3. Incineration
4. Ocean Disposal
5. Out of State
6. Residual Not Classified as Sludge, Managed by Hazardous or Waste Flow Regs.
7. Other (specify here: _____)
8. None Removed

EQUATIONS

A. $\text{Dry Tons} = \frac{\text{Gallons (wet) X Solid Content (of the gallons)}}{240}$

B. $\text{Dry Tons} = \frac{\text{Cubic Yards (wet) X Solid Content (of the cubic yards)}}{(Y)}$

y = 1.185 where solid content is less than 15%
= 1.265 where solid content is 16% to 23%
= 1.58 where solid content is 24% to 29%
= 1.9 where solid content is greater than 30%

C. Dry Tons = Tons (wet) X Solid Content (of the wet tons)

D. $\text{Volatile Solids Reduction} = \frac{\text{VS before X VS after}}{\text{VX before— (VS before X VS after)}} \times 100$

NOTE: The total and volatile solid contents in the above equations must be expressed as a decimal, for example:

1% Total Solids = .01
20% Total Solids = .20

Alternative equations may be utilized if approved in writing by NJDEP.

946430078

New Jersey Department of Environmental Protection
Division of Water Resources

METALS AND SELECTED CHEMICAL PARAMETERS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY
0 0 2 1 0 1 6	0 6	1 9 9 3	5 2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Centrifuged (Lime Stabilized) Sludge

PARAMETER	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Metals			
Arsenic	01002	196	
Beryllium	01012	036	*
Cadmium	61527	1115	
Chromium	61512	1507 0	
Copper	61506	4760 5	
Iron	01045	3706	
Lead	61503	281	
Mercury	01260	115	
Molybdenum	01062	463	
Nickel	61515	6135	
Selenium	61518	283	*
Zinc	61509	702	
Selected Chemical			
Total Nitrogen	00625	208 44	
Ammonia Nitrogen	71845	1390	
Nitrate Nitrogen	71850	156	
Oil and Grease	00550	15194 0	
Phenols	46000	491	
Phosphorus	00665	5750	
Calcium	00916	18337 5	
Magnesium	00927	2409	
Potassium	00937	1286	
Cyanide	00720	2345	
Fluoride	00951	457	
Chloride	00940	3550	

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli — Name of Authorized Agent (Print)
Chief Chemist — Title
Arthur A Martinelli — Signature
JUL 9, 1993 — Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07407

946430079

New Jersey Department of Environmental Protection
Division of Water Resources

METALS AND SELECTED CHEMICAL PARAMETERS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY
0 0 2 1 0 1 6	0 7	1 9 9 3	5 2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Centrifuged (Lime Stabilized) Sludge

PARAMETER	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Metals			
Arsenic	01002	194	
Beryllium	01012	015	
Cadmium	61527	1040	
Chromium	61512	1201 0	
Copper	61506	3429 5	
Iron	01045	2810	
Lead	61503	181	
Mercury	01260	060	
Molybdenum	01062	321	
Nickel	61515	4545	
Selenium	61518	295	
Zinc	61509	7035	
Selected Chemical			
Total Nitrogen	00625	28820	
Ammonia Nitrogen	71845	208	
Nitrate Nitrogen	71850	1540	
Oil and Grease	00550	3550 3	
Phenols	46000	856	
Phosphorus	00665	6360	
Calcium	00916	241438	
Magnesium	00927	3323	
Potassium	00937	1444	
Cyanide	00720	1923	
Fluoride	00951	212	
Chloride	00940	3860	

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli — Name of Authorized Agent (Print)
Chief Chemist — Title
Signature
AUG 24, 1993 — Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07407

946430080

New Jersey Department of Environmental Protection
Division of Water Resources

TOXIC ORGANIC COMPOUNDS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	Yr.	REPORTING CATEGORY
0021016	07	1993	52

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Centrifuged (Lime Stabilized) Sludge

PARAMETER	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Pesticides and			
Aldrin	39330	0.159	*
Chlordane	39350	2.27	*
Dieldrin	39380	0.181	*
DDT	39370	0.952	*
Heptachlor	39410	0.068	*
Lindane	39782	0.204	*
PCB's	39516	1.13	*
Toxaphene	39400	2.27	*
Purgeables			
Benzene	34030	1.99	*
Carbon tetrachloride	32102	1.99	*
Chloroform	32106	1.99	*
Methylene Chloride	34423	1.99	*
Tetrachloroethylene	34475	1.99	*
Trichloroethylene	39180	1.99	*
Vinyl chloride	39175	3.97	*
Base/Neutrals and Acids			
Benzidine	39120	2.06	*
Benzo(a)pyrene	34247	0.412	*
Bis(2-ethylhexyl) phthalate	39100	1.80	
Hexachlorobenzene	39700	0.412	*
Hexachlorobutadiene	39702	0.412	*
N-nitrosodimethylamine	34438	0.824	*

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli	Chief Chemist, PVSC		Aug 6, 1993
Name of Authorized Agent (Print)	Title	Signature	Date

Laboratory Name: Priority One Testing Laboratory Cert No. 09399

946430081

VWX-014
92

NEW JERSEY DEPT. OF ENVIRONMENTAL PROTECTION AND ENERGY

MONITORING REPORT — TRANSMITTAL SHEET

NJPDES NO.	REPORTING PERIOD MO. YR.		MO. YR.
0 0 2 1 0 1 6	0 8 9 3	THRU	0 8 9 3

PERMITTEE:
Name Passaic Valley Sewerage Commissioners
Address 600 Wilson Avenue
Newark, New Jersey 07105

FACILITY:
Name Passaic Valley Sewerage Commissioners
Address 600 Wilson Avenue
Newark, N.J. 07105 (County) Essex
Telephone (201) 344-1800

* For reporting period 8/93

FORMS ATTACHED *(Indicate Quantity of Each)*

SLUDGE REPORTS - SANITARY
[1]* T-VWX-007 [ ] T-VWX-008 [1]* T-VWX-009

SLUDGE REPORTS - INDUSTRIAL
[ ] T-VWX-010A [ ] T-VWX-010B

WASTEWATER REPORTS
[ ] T-VWX-011 [ ] T-VWX-012 [ ] T-VWX-013

GROUNDWATER REPORTS
[ ] VWX-015(A,B) [ ] VWX-016 [ ] VWX-017

NPDES DISCHARGE MONITORING REPORT
[ ] EPA FORM 3320-1

OPERATING EXCEPTIONS

	YES	NO
DYE TESTING	☐	☐
TEMPORARY BYPASSING	☐	☐
DISINFECTION INTERRUPTION	☐	☐
MONITORING MALFUNCTIONS	☐	☐
UNITS OUT OF OPERATION	☐	☐
OTHER	☐	☐

(Detail any "Yes" on reverse side in appropriate space.)

***NOTE:** The "Hours Attended at Plant" on the reverse of this sheet must also be completed.*

AUTHENTICATION - I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

LICENSED OPERATOR

Name *(Printed)* Phil Habrukowich
Grade & Registry No. NJ S-4 #3972
Signature [signature]
Date 9/23/93

PRINCIPAL EXECUTIVE OFFICER or DULY AUTHORIZED REPRESENTATIVE

Name *(Printed)* Carmine T. Perrapato
Title *(Printed)* Executive Director
Signature [signature]
9/28/93

946430082

Passaic Valley
Sewerage Commissioners

600 WILSON AVENUE
NEWARK, N.J. 07105
(201) 344-1800
Fax: (201) 344-2951

This domestic wastewater sludge report represents dewatered cake which has been centrifuged and lime stabilized.

946430083

T-VWX-007
5/89

New Jersey Department of Environmental Protection
Division of Water Resources

DOMESTIC WASTEWATER SLUDGE REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	Yr.	REPORTING CATEGORY		
0 0 2 1 0 1 6	0 8	1 9 9 3	5	1	Page 2 of 2

FACILITY NAME: Passaic Valley Sewerage Commissioners

A. REPORTING CATEGORY INFORMATION

1. Permitted Wastewater Flow	(MGD)	A1:	330.0
2. Industrial Conribution	(% of influent)	A2:	18.
3. Average Daily Septage Treated	(Gallons/Day)	A3:	3065

B. INFORMATION ON SLUDGE PRODUCED IN TREATMENT PROCESS

1. Average Total Solids of Sludge	(% by weight)	B1:	4.97
2. Average Daily Sludge Production	(Gallons/Day)	B2:	51982
3. Average Daily Sludge Production	(Dry Tons/Day	B3:	1077.1

**C. INFORMATION ON SLUDGE REMOVED FOR ULTIMATE MANAGEMENT

1. Complete ONLY If Liquid Sludge Is Removed			
a. Total Solids of Liquid Sludge	(% by weight)	C1:	
b. Average Daily Sludge Removal	(Gallons/Day	C2:	
2. Complete ONLY If Dewatered Sludge Is Removed			
a. Total Solids of Dewatered Sludge	(% by weight)	C3:	4.97
b. Complete ONE of the following:			
i. Average Daily Sludge Removal	(Gallons/Day)	C4:	
Total Solids of 2.b.i.	(% by weight)	C5:	
ii. Average Daily Sludge Removal	(Wet Cu. Yds/Day)	C6:	
iii. Average Daily Sludge Removal	(Wet Tons/Day)	C7:	216.6
3. Total Average Daily Sludge Removal	(Dry Tons/Day)	C8:	1077.1
4. pH of Sludge Removed	(Standard Units)	C9:	11.2

D. ULTIMATE SLUDGE MANAGEMENT SITE (See Codes on Reverse)

METHOD CODE	HAULER REGISTRY	FACILITY/OPERATION	PERMIT NO.
5	17244	OUT OF STATE	

E. PATHOGEN REDUCTION INFORMATION (See Codes and Complete Reverse)

METHOD CODE	FACILITY/OPERATION	PERMIT NO.	FOR DEP USE ONLY PSRP	PFRP
D	PASSAIC VALLEY	0021016		

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli	Chief Chemist		Sep 13, 1993
Name of Authorized Agent (Print)	Title	Signature	Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07250

946430084

PATHOGEN REDUCTION METHOD CODE (Appropriate sections must be completed)

A. Anaerobic Digestion; or

B. Aerobic Digestion; complete the following:

		UNIT 1	UNIT 2	UNIT 3
1. Percent Volatile Solids:				
a. Before Stabilization	(as weight % of TS)	____	____	____
b. After Stabilization	(as weight % of TS)	____	____	____
c. Percent Reduction	(see equation)	____	____	____
2. Detention Time	(Days)	____	____	____
3. Average Temperature	(Degrees C)	____	____	____

C. Air Drying (Report on any beds emptied for the report period)

BED	DATE SLUDGE LOADED Month	Day	Year	DEPTH POURED Inches	DATE SLUDGE REMOVED Month	Day	Year
1.	__	__	____	__	__	__	____
2.	__	__	____	__	__	__	____
3.	__	__	____	__	__	__	____
4.	__	__	____	__	__	__	____
5.	__	__	____	__	__	__	____

D. State Approved Lime Stabilization
E. Thermal Treatment/Drying
F. Phragmites
G. Composting
H. Other (specify here: _____)
I. None

ULTIMATE SLUDGE MANAGEMENT METHOD CODE

1. Land Application at a NJPDES Permitted Site
2. State Approved Distribution Permit
3. Incineration
4. Ocean Disposal
5. Out of State
6. Residual Not Classified as Sludge, Managed by Hazardous or Waste Flow Regs.
7. Other (specify here: _____)
8. None Removed

EQUATIONS

A. $\text{Dry Tons} = \frac{\text{Gallons (wet) X Solid Content (of the gallons)}}{240}$

B. $\text{Dry Tons} = \frac{\text{Cubic Yards (wet) X Solid Content (of the cubic yards)}}{(Y)}$

y = 1.185 where solid content is less than 15%
= 1.265 where solid content is 16% to 23%
= 1.58 where solid content is 24% to 29%
= 1.9 where solid content is greater than 30%

C. Dry Tons = Tons (wet) X Solid Content (of the wet tons)

D. $\text{Volatile Solids Reduction} = \frac{\text{VS before X VS after}}{\text{VX before— (VS before X VS after)}} \times 100$

NOTE: The total and volatile solid contents in the above equations must be expressed as a decimal, for example:

1% Total Solids = .01
20% Total Solids = .20

Alternative equations may be utilized if approved in writing by NJDEP.

946430085

New Jersey Department of Environmental Protection
Division of Water Resources

TOXIC ORGANIC COMPOUNDS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	Yr.	REPORTING CATEGORY
0 0 2 1 0 1 6	0 8	1 9 9 3	5 2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Centrifuged (Lime Stabilized) Sludge

PARAMETER	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Pesticides and			
Aldrin	39330	0.013	*
Chlordane	39350	0.192	*
Dieldrin	39380	0.015	*
DDT	39370	0.081	*
Heptachlor	39410	0.006	*
Lindane	39782	0.017	*
PCB's	39516	0.959	*
Toxaphene	39400	1.92	*
Purgeables			
Benzene	34030	1.20	*
Carbon tetrachloride	32102	1.20	*
Chloroform	32106	1.20	*
Methylene Chloride	34423	1.20	*
Tetrachloroethylene	34475	1.20	*
Trichloroethylene	39180	1.20	*
Vinyl chloride	39175	2.40	*
Base/Neutrals and Acids			
Benzidine	39120	100	*
Benzo(a)pyrene	34247	1.25	*
Bis(2-ethylhexyl) phthalate	39100	1.25	*
Hexachlorobenzene	39700	1.25	*
Hexachlorobutadiene	39702	1.25	*
N-nitrosodimethylamine	34438	1.25	*

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli — Name of Authorized Agent (Print)
Chief Chemist, PVSC — Title
Signature
SEP 1, 1993 — Date

Laboratory Name: Priority One Testing Lab — t No. 09399

946430086

Passaic Valley
Sewerage Commissioners

600 WILSON AVENUE
NEWARK, N.J. 07105
(201) 344-1800
Fax: (201) 344-2951

This domestic wastewater sludge report represents dewatered cake which originated from our Zimpro process.

946430087

T-VWX-007
5/89.

New Jersey Department of Environmental Protection
Division of Water Resources

DOMESTIC WASTEWATER SLUDGE REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	Yr.	REPORTING CATEGORY		
0 0 2 1 0 1 6	0 8	1 9 9 3	5	1	Page 1 of 2

FACILITY NAME: Passaic Valley Sewerage Commissioners

A. REPORTING CATEGORY INFORMATION

1. Permitted Wastewater Flow	(MGD)	A1:	330.0
2. Industrial Conribution	(% of influent)	A2:	18.
3. Average Daily Septage Treated	(Gallons/Day)	A3:	3065.

B. INFORMATION ON SLUDGE PRODUCED IN TREATMENT PROCESS

1. Average Total Solids of Sludge	(% by weight)	B1:	58.3
2. Average Daily Sludge Production	(Gallons/Day)	B2:	353933.
3. Average Daily Sludge Production	(Dry Tons/Day	B3:	8595

**C. INFORMATION ON SLUDGE REMOVED FOR ULTIMATE MANAGEMENT

1. Complete ONLY If Liquid Sludge Is Removed			
a. Total Solids of Liquid Sludge	(% by weight)	C1:	.
b. Average Daily Sludge Removal	(Gallons/Day	C2:	.
2. Complete ONLY If Dewatered Sludge Is Removed			
a. Total Solids of Dewatered Sludge	(% by weight)	C3:	58.3
b. Complete ONE of the following:			
i. Average Daily Sludge Removal	(Gallons/Day)	C4:	.
Total Solids of 2.b.i.	(% by weight)	C5:	.
ii. Average Daily Sludge Removal	(Wet Cu. Yds/Day)	C6:	.
iii. Average Daily Sludge Removal	(Wet Tons/Day)	C7:	1474.
3. Total Average Daily Sludge Removal	(Dry Tons/Day)	C8:	8595
4. pH of Sludge Removed	(Standard Units)	C9:	5.5

D. ULTIMATE SLUDGE MANAGEMENT SITE (See Codes on Reverse)

METHOD CODE	HAULER REGISTRY	FACILITY/OPERATION	PERMIT NO.
5	17244	OUT OF STATE	

E. PATHOGEN REDUCTION INFORMATION (See Codes and Complete Reverse)

METHOD CODE	FACILITY/OPERATION	PERMIT NO.	FOR DEP USE ONLY PSRP	PFRP
E	PASSAIC VALLEY	0021016		

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli	Chief Chemist		Sep 13, 1993
Name of Authorized Agent (Print)	Title	Signature	Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07250

946430088

PATHOGEN REDUCTION METHOD CODE (Appropriate sections must be completed)

A. Anaerobic Digestion: or

B. Aerobic Digestion; complete the following:

		UNIT 1	UNIT 2	UNIT 3
1. Percent Volatile Solids:				
a. Before Stabilization	(as weight % of TS)	____	____	____
b. After Stabilization	(as weight % of TS)	____	____	____
c. Percent Reduction	(see equation)	____	____	____
2. Detention Time	(Days)	____	____	____
3. Average Temperature	(Degrees C)	____	____	____

C. Air Drying (Report on any beds emptied for the report period)

BED	DATE SLUDGE LOADED Month	Day	Year	DEPTH POURED Inches	DATE SLUDGE REMOVED Month	Day	Year
1.	__	__	____	__	__	__	____
2.	__	__	____	__	__	__	____
3.	__	__	____	__	__	__	____
4.	__	__	____	__	__	__	____
5.	__	__	____	__	__	__	____

D. State Approved Lime Stabilization
E. Thermal Treatment/Drying
F. Phragmites
G. Composting
H. Other (specify here: _____)
I. None

ULTIMATE SLUDGE MANAGEMENT METHOD CODE

1. Land Application at a NJPDES Permitted Site
2. State Approved Distribution Permit
3. Incineration
4. Ocean Disposal
5. Out of State
6. Residual Not Classified as Sludge, Managed by Hazardous or Waste Flow Regs.
7. Other (specify here: _____)
8. None Removed

EQUATIONS

A. $$\text{Dry Tons} = \frac{\text{Gallons (wet) X Solid Content (of the gallons)}}{240}$$

B. $$\text{Dry Tons} = \frac{\text{Cubic Yards (wet) X Solid Content (of the cubic yards)}}{(Y)}$$

y = 1.185 where solid content is less than 15%
= 1.265 where solid content is 16% to 23%
= 1.58 where solid content is 24% to 29%
= 1.9 where solid content is greater than 30%

C. Dry Tons = Tons (wet) X Solid Content (of the wet tons)

D. $$\text{Volatile Solids Reduction} = \frac{\text{VS before X VS after}}{\text{VX before} - (\text{VS before X VS after})} \times 100$$

NOTE: The total and volatile solid contents in the above equations must be expressed as a decimal, for example:

1% Total Solids = .01
20% Total Solids = .20

Alternative equations may be utilized if approved in writing by NJDEP.

946430089

T-VWX-009
5/89

New Jersey Department of Environmental Protection
Division of Water Resources

TOXIC ORGANIC COMPOUNDS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY
0 0 2 1 0 1 6	0 8	1 9 9 3	5 2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Filter Pressed (Wet Air Oxidized) Sludge

PARAMETER	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Pesticides and			
Aldrin	39330	0.14	*
Chlordane	39350	1.6	*
Dieldrin	39380	0.13	*
DDT	39370	0.68	*
Heptachlor	39410	0.04	*
Lindane	39782	0.14	*
PCB's	39516	8.1	*
Toxaphene	39400	1.6	*
Purgeables			
Benzene	34030	1.0	*
Carbon tetrachloride	32102	1.0	*
Chloroform	32106	1.0	*
Methylene Chloride	34423	1.0	*
Tetrachloroethylene	34475	1.0	*
Trichloroethylene	39180	1.0	*
Vinyl chloride	39175	2.1	*
Base/Neutrals and Acids			
Benzidine	39120	130	*
Benzo(a)pyrene	34247	1.6	*
Bis(2-ethylhexyl) phthalate	39100	4.6	
Hexachlorobenzene	39700	1.6	*
Hexachlorobutadiene	39702	1.6	*
N-nitrosodimethylamine	34438	1.6	*

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli — Name of Authorized Agent (Print)
Chief Chemist, PVSC — Title
[signature] — Signature
SEP. 1, 1993 — Date

Laboratory Name: Priority One Testing Laboratory
Cert No. 09399

946430090

VWX-014
92

NEW JERSEY DEPT. OF ENVIRONMENTAL PROTECTION AND ENERGY

Page 1 of 1

MONITORING REPORT – TRANSMITTAL SHEET

NJPDES NO.	REPORTING PERIOD MO. YR.	REPORTING PERIOD MO. YR.
0 0 2 1 0 1 6	0 9 9 3	THRU 0 9 9 3

PERMITTEE: Name Passaic Valley Sewerage Commissioners

Address 600 Wilson Avenue

Newark, New Jersey 07105

FACILITY: Name Passaic Valley Sewerage Commissioners

Address 600 Wilson Avenue

Newark, N.J. 07105 (County) Essex

Telephone (201) 344-1800

* For reporting period 9/93
** For reporting period 8/93

FORMS ATTACHED *(Indicate Quantity of Each)*

SLUDGE REPORTS - SANITARY

[1]* T-VWX-007 [1]** T-VWX-008 [1]* T-VWX-009

SLUDGE REPORTS - INDUSTRIAL

[ ] T-VWX-010A [ ] T-VWX-010B

WASTEWATER REPORTS

[ ] T-VWX-011 [ ] T-VWX-012 [ ] T-VWX-013

GROUNDWATER REPORTS

[ ] VWX-015(A,B) [ ] VWX-016 [ ] VWX-017

NPDES DISCHARGE MONITORING REPORT

[ ] EPA FORM 3320-1

OPERATING EXCEPTIONS

	YES	NO
DYE TESTING	☐	☐
TEMPORARY BYPASSING	☐	☐
DISINFECTION INTERRUPTION	☐	☐
MONITORING MALFUNCTIONS	☐	☐
UNITS OUT OF OPERATION	☐	☐
OTHER	☐	☐

(Detail any "Yes" on reverse side in appropriate space.)

NOTE: ***The "Hours Attended at Plant" on the reverse of this sheet must also be completed.***

AUTHENTICATION - I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

LICENSED OPERATOR

Name *(Printed)* Phil Habrukowich

Grade & Registry No. NJ S-4 #3972

Signature Phil Habrukowich

Date 10/25/93

946430091

PRINCIPAL EXECUTIVE OFFICER or DULY AUTHORIZED REPRESENTATIVE

Name *(Printed)* Carmine T. Perrapato

Title *(Printed)* Executive Director

Signature

Date 10/25/93

Passaic Valley
Sewerage Commissioners

600 WILSON AVENUE
NEWARK, N.J. 07105
(201) 344-1800
Fax: (201) 344-2951

This domestic wastewater sludge report represents dewatered cake which originated from our Zimpro process.

T-VWX-007
5/89

New Jersey Department of Environmental Protection
Division of Water Resources

DOMESTIC WASTEWATER SLUDGE REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY		
0 0 2 1 0 1 6	0 9	1 9 9 3	5	1	Page 1 of 2

FACILITY NAME: Passaic Valley Sewerage Commissioners

A. REPORTING CATEGORY INFORMATION

1. Permitted Wastewater Flow	(MGD)	A1:	330.0
2. Industrial Conribution	(% of influent)	A2:	18.
3. Average Daily Septage Treated	(Gallons/Day)	A3:	2667.

B. INFORMATION ON SLUDGE PRODUCED IN TREATMENT PROCESS

1. Average Total Solids of Sludge	(% by weight)	B1:	6.36
2. Average Daily Sludge Production	(Gallons/Day)	B2:	33639.
3. Average Daily Sludge Production	(Dry Tons/Day	B3:	8907.

**C. INFORMATION ON SLUDGE REMOVED FOR ULTIMATE MANAGEMENT

1. Complete ONLY If Liquid Sludge Is Removed			
a. Total Solids of Liquid Sludge	(% by weight)	C1:	
b. Average Daily Sludge Removal	(Gallons/Day	C2:	
2. Complete ONLY If Dewatered Sludge Is Removed			
a. Total Solids of Dewatered Sludge	(% by weight)	C3:	6.36
b. Complete ONE of the following:			
i. Average Daily Sludge Removal	(Gallons/Day)	C4:	
Total Solids of 2.b.i.	(% by weight)	C5:	
ii. Average Daily Sludge Removal	(Wet Cu. Yds/Day)	C6:	
iii. Average Daily Sludge Removal	(Wet Tons/Day)	C7:	1402.
3. Total Average Daily Sludge Removal	(Dry Tons/Day)	C8:	8907.
4. pH of Sludge Removed	(Standard Units)	C9:	5.9

D. ULTIMATE SLUDGE MANAGEMENT SITE (See Codes on Reverse)

METHOD CODE	HAULER REGISTRY	FACILITY/OPERATION	PERMIT NO.
5	17244	OUT OF STATE	

E. PATHOGEN REDUCTION INFORMATION (See Codes and Complete Reverse)

METHOD CODE	FACILITY/OPERATION	PERMIT NO.	FOR DEP USE ONLY PSRP	FOR DEP USE ONLY PFRP
E	PASSAIC VALLEY	0021016		

CERTIFICATE OF AUTHENTICITY

Arthur A. Martinelli	Chief Chemist		Oct 21, 1993
Name of Authorized Agent (Print)	Title	Signature	Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07250

946430093

PATHOGEN REDUCTION METHOD CODE (Appropriate sections must be completed)

A. Anaerobic Digestion; or

B. Aerobic Digestion; complete the following:

		UNIT 1	UNIT 2	UNIT 3
1. Percent Volatile Solids:				
a. Before Stabilization	(as weight % of TS)	____	____	____
b. After Stabilization	(as weight % of TS)	____	____	____
c. Percent Reduction	(see equation)	____	____	____
2. Detention Time	(Days)	____	____	____
3. Average Temperature	(Degrees C)	____	____	____

C. Air Drying (Report on any beds emptied for the report period)

BED	DATE SLUDGE LOADED Month	Day	Year	DEPTH POURED Inches	DATE SLUDGE REMOVED Month	Day	Year
1.	__	__	____	__	__	__	____
2.	__	__	____	__	__	__	____
3.	__	__	____	__	__	__	____
4.	__	__	____	__	__	__	____
5.	__	__	____	__	__	__	____

D. State Approved Lime Stabilization
E. Thermal Treatment/Drying
F. Phragmites
G. Composting
H. Other (specify here: _____)
I. None

ULTIMATE SLUDGE MANAGEMENT METHOD CODE

1. Land Application at a NJPDES Permitted Site
2. State Approved Distribution Permit
3. Incineration
4. Ocean Disposal
5. Out of State
6. Residual Not Classified as Sludge, Managed by Hazardous or Waste Flow Regs.
7. Other (specify here: _____)
8. None Removed

EQUATIONS

A. $\text{Dry Tons} = \dfrac{\text{Gallons (wet) X Solid Content (of the gallons)}}{240}$

B. $\text{Dry Tons} = \dfrac{\text{Cubic Yards (wet) X Solid Content (of the cubic yards)}}{(Y)}$

y = 1.185 where solid content is less than 15%
= 1.265 where solid content is 16% to 23%
= 1.58 where solid content is 24% to 29%
= 1.9 where solid content is greater than 30%

C. Dry Tons = Tons (wet) X Solid Content (of the wet tons)

D. $\text{Volatile Solids Reduction} = \dfrac{\text{VS before X VS after}}{\text{VX before— (VS before X VS after)}} \text{ X } 100$

NOTE: The total and volatile solid contents in the above equations must be expressed as a decimal, for example:

1% Total Solids = .01
20% Total Solids = .20

Alternative equations may be utilized if approved in writing by NJDEP.

946430094

New Jersey Department of Environmental Protection
Division of Water Resources

METALS AND SELECTED CHEMICAL PARAMETERS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	Yr.	REPORTING CATEGORY
0 0 2 1 0 1 6	0 8	1 9 9 3	5 2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Filter Press (Wet Air Oxidized) Sludge

PARAMETERS	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Metals			
Arsenic	01002	160	
Beryllium	01012	029	
Cadmium	61527	344	
Chromium	61512	59295	
Copper	61506	19220	
Iron	01045	11300	
Lead	61503	842	
Mercury	01260	388	
Molybdenum	01062	269	
Nickel	61515	886	
Selenium	61518	278	*
Zinc	61509	31885	
Selected Chemical Parameters			
Total Nitrogen	00625	11654	
Ammonia	71845	856	
Nitrate Nitrogen	71850	63	
Oil and Grease	00550	16809 6	
Phenols	46000	7032	
Phosphorus	00665	15900	
Calcium	00916	13619	
Magnesium	00927	3221	
Potassium	00937	714	
Cyanide	00720	50	
Fluoride	00951	972	
Chloride	00940	350	*

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli	Chief Chemist		Oct. 13, 1993
Name of Authorized Agent (Print)	Title	Signature	Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07407

946430095

T-VWX-009
5/89

New Jersey Department of Environmental Protection
Division of Water Resources

TOXIC ORGANIC COMPOUNDS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	Yr.	REPORTING CATEGORY
0 0 2 1 0 1 6	0 9	1 9 9 3	5 2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Filter Pressed (Wet Air Oxidized) Sludge

PARAMETERS	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Pesticides and PCB's			
Aldrin	39330	0.259	*
Chlordane	39350	3.69	*
Dieldrin	39380	0.296	*
DDT	39370	1.55	*
Heptachlor	39410	0.111	*
Lindane	39782	0.322	*
PCB's	39516	1.85	*
Toxaphene	39400	3.69	*
Purgeables			
Benzene	34030	2.08	*
Carbon tetrachloride	32102	2.08	*
Chloroform	32106	2.08	*
Methylene Chloride	34423	2.08	*
Tetrachloroethylene	34475	2.08	*
Trichloroethylene	39180	2.08	*
Vinyl chloride	39175	4.16	*
Base/Neutrals and Acids			
Benzidine	39120	8.31	*
Benzo(a)pyrene	34247	8.31	*
Bis(2-ethylhexyl) phthalate	39100	13.5	
Hexachlorobenzene	39700	8.31	*
Hexachlorobutadiene	39702	8.31	*
N-nitrosodimethylamine	34438	8.31	*

CERTIFICATE OF AUTHENTICITY

Arthur A. Martinelli — Name of Authorized Agent (Print)
Chief Chemist, — Title
Signature
Oct. 13, 1993 — Date

Laboratory Name: Priority One Testing Laboratory
Cert No. 09399

946430096

Passaic Valley
Sewerage Commissioners

600 WILSON AVENUE
NEWARK, N.J. 07105
(201) 344-1800
Fax: (201) 344-2951

This domestic wastewater sludge report represents dewatered cake which has been centrifuged and lime stabilized.

946430097

T-VWX-007
5/89

New Jersey Department of Environmental Protection
Division of Water Resources

DOMESTIC WASTEWATER SLUDGE REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY		
0 0 2 1 0 1 6	0 9	1 9 9 3	5	1	Page 2 of 2

FACILITY NAME: Passaic Valley Sewerage Commissioners

A. REPORTING CATEGORY INFORMATION

1. Permitted Wastewater Flow	(MGD)	A1:	33.00
2. Industrial Conribution	(% of influent)	A2:	18.
3. Average Daily Septage Treated	(Gallons/Day)	A3:	2667.

B. INFORMATION ON SLUDGE PRODUCED IN TREATMENT PROCESS

1. Average Total Solids of Sludge	(% by weight)	B1:	4.52
2. Average Daily Sludge Production	(Gallons/Day)	B2:	75128.
3. Average Daily Sludge Production	(Dry Tons/Day	B3:	14.143

**C. INFORMATION ON SLUDGE REMOVED FOR ULTIMATE MANAGEMENT

1. Complete ONLY If Liquid Sludge Is Removed			
a. Total Solids of Liquid Sludge	(% by weight)	C1:	
b. Average Daily Sludge Removal	(Gallons/Day	C2:	
2. Complete ONLY If Dewatered Sludge Is Removed			
a. Total Solids of Dewatered Sludge	(% by weight)	C3:	4.52
b. Complete ONE of the following:			
i. Average Daily Sludge Removal	(Gallons/Day)	C4:	
Total Solids of 2.b.i.	(% by weight)	C5:	
ii. Average Daily Sludge Removal	(Wet Cu. Yds/Day)	C6:	
iii. Average Daily Sludge Removal	(Wet Tons/Day)	C7:	31.30
3. Total Average Daily Sludge Removal	(Dry Tons/Day)	C8:	14.143
4. pH of Sludge Removed	(Standard Units)	C9:	11.3

D. ULTIMATE SLUDGE MANAGEMENT SITE (See Codes on Reverse)

METHOD CODE	HAULER REGISTRY	FACILITY/OPERATION	PERMIT NO.
5	17244	OUT OF STATE	

E. PATHOGEN REDUCTION INFORMATION (See Codes and Complete Reverse)

METHOD CODE	FACILITY/OPERATION	PERMIT NO.	FOR DEP USE ONLY PSRP	FOR DEP USE ONLY PFRP
D	PASSAIC VALLEY	0021016		

CERTIFICATE OF AUTHENTICITY

Arthur A. Martinelli	Chief Chemist		Oct 21, 1993
Name of Authorized Agent (Print)	Title	Signature	Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07250

946430098

PATHOGEN REDUCTION METHOD CODE (Appropriate sections must be completed)

A. Anaerobic Digestion: or
B. Aerobic Digestion: complete the following:

		UNIT 1	UNIT 2	UNIT 3
1. Percent Volatile Solids:				
a. Before Stabilization	(as weight % of TS)			
b. After Stabilization	(as weight % of TS)			
c. Percent Reduction	(see equation)			
2. Detention Time	(Days)			
3. Average Temperature	(Degrees C)			

C. Air Drying (Report on any beds emptied for the report period)

BED	DATE SLUDGE LOADED Month	Day	Year	DEPTH POURED Inches	DATE SLUDGE REMOVED Month	Day	Year
1.							
2.							
3.							
4.							
5.							

D. State Approved Lime Stabilization
E. Thermal Treatment/Drying
F. Phragmites
G. Composting
H. Other (specify here: _____)
I. None

ULTIMATE SLUDGE MANAGEMENT METHOD CODE

1. Land Application at a NJPDES Permitted Site
2. State Approved Distribution Permit
3. Incineration
4. Ocean Disposal
5. Out of State
6. Residual Not Classified as Sludge. Managed by Hazardous or Waste Flow Regs.
7. Other (specify here: _____)
8. None Removed

EQUATIONS

A. Dry Tons = $\frac{\text{Gallons (wet) X Solid Content (of the gallons)}}{240}$

B. Dry Tons = $\frac{\text{Cubic Yards (wet) X Solid Content (of the cubic yards)}}{(Y)}$

y = 1.185 where solid content is less than 15%
= 1.265 where solid content is 16% to 23%
= 1.58 where solid content is 24% to 29%
= 1.9 where solid content is greater than 30%

C. Dry Tons = Tons (wet) X Solid Content (of the wet tons)

D. Volatile Solids Reduction = $\frac{\text{VS before X VS after}}{\text{VX before— (VS before X VS after)}}$ X 100

NOTE: The total and volatile solid contents in the above equations must be expressed as a decimal, for example:

1% Total Solids = .01
20% Total Solids = .20

Alternative equations may be utilized if approved in writing by NJDEP.

946430099

New Jersey Department of Environmental Protection
Division of Water Resources

METALS AND SELECTED CHEMICAL PARAMETERS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	Yr.	REPORTING CATEGORY	
0 0 2 1 0 1 6	0 8	1 9 9 3	5	2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Centrifuged (Lime Stabilized) Sludge

PARAMETERS	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Metals			
Arsenic	01002	222	
Beryllium	01012	016	
Cadmium	61527	1090	
Chromium	61512	14695	
Copper	61506	48755	
Iron	01045	3190	
Lead	61503	2460	
Mercury	01260	112	
Molybdenum	01062	450	
Nickel	61515	4210	
Selenium	61518	276	*
Zinc	61509	7130	
Selected Chemical Parameters			
Total Nitrogen	00625	15487	
Ammonia	71845	409	
Nitrate Nitrogen	71850	99	
Oil and Grease	00550	14084	
Phenols	46000	986	
Phosphorus	00665	6230	
Calcium	00916	278500	
Magnesium	00927	2642	
Potassium	00937	915	
Cyanide	00720	56	
Fluoride	00951	128	
Chloride	00940	3470	

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli	Chief Chemist		Oct 13, 1993
Name of Authorized Agent (Print)	Title	Signature	Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07407

946430100

New Jersey Department of Environmental Protection
Division of Water Resources

TOXIC ORGANIC COMPOUNDS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	Yr.	REPORTING CATEGORY	
0 0 2 1 0 1 6	0 9	1 9 9 3	5	2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Centrifuged (Lime Stabilized) Sludge

PARAMETERS	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Pesticides and PCB's			
Aldrin	39330	0.029	*
Chlordane	39350	0.414	*
Dieldrin	39380	0.033	*
DDT	39370	0.174	*
Heptachlor	39410	0.012	*
Lindane	39782	0.037	*
PCB's	39516	2.07	*
Toxaphene	39400	4.14	*
Purgeables			
Benzene	34030	2.85	*
Carbon tetrachloride	32102	2.85	*
Chloroform	32106	2.85	*
Methylene Chloride	34423	2.85	*
Tetrachloroethylene	34475	2.85	*
Trichloroethylene	39180	2.85	*
Vinyl chloride	39175	5.69	*
Base/Neutrals and Acids			
Benzidine	39120	4.55	*
Benzo(a)pyrene	34247	4.55	*
Bis(2-ethylhexyl) phthalate	39100	6.87	
Hexachlorobenzene	39700	4.55	*
Hexachlorobutadiene	39702	4.55	*
N-nitrosodimethylamine	34438	9.10	*

CERTIFICATE OF AUTHENTICITY

Arthur A. Martinelli — Name of Authorized Agent (Print)
Chief Chemist, — Title
Signature
Oct 13, 1993 — Date

Laboratory Name: Priority One Testing Laboratory
Cert No. 09399

946430101

VWX-014
92

NEW JERSEY DEPT. OF ENVIRONMENTAL PROTECTION AND ENERGY

MONITORING REPORT – TRANSMITTAL SHEET

NJPDES NO.	REPORTING PERIOD MO. YR.		MO. YR.
0 0 2 1 1 0 1 6	1 0 9 3	THRU	1 0 9 3

PERMITTEE: Name Passaic Valley Sewerage Commissioners

Address 600 Wilson Avenue

Newark, New Jersey 07105

FACILITY: Name Passaic Valley Sewerage Commissioners

Address 600 Wilson Avenue

Newark, N.J. 07105 (County) Essex

Telephone (201) 344-1800

* For reporting period 10/93
** For reporting period 9/93

FORMS ATTACHED *(Indicate Quantity of Each)*

SLUDGE REPORTS - SANITARY

[1]* T-VWX-007 [1]** T-VWX-008 [1]* T-VWX-009

SLUDGE REPORTS - INDUSTRIAL

[ ] T-VWX-010A [ ] T-VWX-010B

WASTEWATER REPORTS

[ ] T-VWX-011 [ ] T-VWX-012 [ ] T-VWX-013

GROUNDWATER REPORTS

[ ] VWX-015(A,B) [ ] VWX-016 [ ] VWX-017

NPDES DISCHARGE MONITORING REPORT

[ ] EPA FORM 3320-1

OPERATING EXCEPTIONS

	YES	NO
DYE TESTING	☐	☐
TEMPORARY BYPASSING	☐	☐
DISINFECTION INTERRUPTION	☐	☐
MONITORING MALFUNCTIONS	☐	☐
UNITS OUT OF OPERATION	☐	☐
OTHER	☐	☐

(Detail any "Yes" on reverse side in appropriate space.)

***NOTE:** The "Hours Attended at Plant" on the reverse of this sheet must also be completed.*

AUTHENTICATION - I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

LICENSED OPERATOR

Name *(Printed)* Phil Habrukowich

Grade & Registry No. NJ S-4 #3972

Signature

Date 11/24/93

PRINCIPAL EXECUTIVE OFFICER or DULY AUTHORIZED REPRESENTATIVE

Name *(Printed)* Carmine T. Perrapato

Title *(Printed)* Executive Director

Signature Carmine T. Perrapato

Date 11/24/93

946430102

Passaic Valley
Sewerage Commissioners

600 WILSON AVENUE
NEWARK, N.J. 07105
(201) 344-1800
Fax: (201) 344-2951

This domestic wastewater sludge report represents dewatered cake which originated from our Zimpro process.

946430103

T-VWX-007
5/89

New Jersey Department of Environmental Protection
Division of Water Resources

DOMESTIC WASTEWATER SLUDGE REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	Yr.	REPORTING CATEGORY		
0 0 2 1 0 1 6	1 0	1 9 9 3	5	1	Page 1 of 2

FACILITY NAME: Passaic Valley Sewerage Commissioners

A. REPORTING CATEGORY INFORMATION

1. Permitted Wastewater Flow	(MGD)	A1:	330.0
2. Industrial Conribution	(% of influent)	A2:	18
3. Average Daily Septage Treated	(Gallons/Day)	A3:	2290

B. INFORMATION ON SLUDGE PRODUCED IN TREATMENT PROCESS

1. Average Total Solids of Sludge	(% by weight)	B1:	5.78
2. Average Daily Sludge Production	(Gallons/Day)	B2:	288044
3. Average Daily Sludge Production	(Dry Tons/Day	B3:	69.41

**C. INFORMATION ON SLUDGE REMOVED FOR ULTIMATE MANAGEMENT

1. Complete ONLY If Liquid Sludge Is Removed			
a. Total Solids of Liquid Sludge	(% by weight)	C1:	
b. Average Daily Sludge Removal	(Gallons/Day	C2:	
2. Complete ONLY If Dewatered Sludge Is Removed			
a. Total Solids of Dewatered Sludge	(% by weight)	C3:	5.78
b. Complete ONE of the following:			
i. Average Daily Sludge Removal	(Gallons/Day)	C4:	
Total Solids of 2.b.i.	(% by weight)	C5:	
ii. Average Daily Sludge Removal	(Wet Cu. Yds/Day)	C6:	
iii. Average Daily Sludge Removal	(Wet Tons/Day)	C7:	120.0
3. Total Average Daily Sludge Removal	(Dry Tons/Day)	C8:	69.41
4. pH of Sludge Removed	(Standard Units)	C9:	5.4

D. ULTIMATE SLUDGE MANAGEMENT SITE (See Codes on Reverse)

METHOD CODE	HAULER REGISTRY	FACILITY/OPERATION	PERMIT NO.
5	17244	OUT OF STATE	

E. PATHOGEN REDUCTION INFORMATION (See Codes and Complete Reverse)

METHOD CODE	FACILITY/OPERATION	PERMIT NO.	FOR DEP USE ONLY PSRP	PFRP
E	PASSAIC VALLEY	00210116		

CERTIFICATE OF AUTHENTICITY

Arthur A. Martinelli	Chief Chemist		11/16/93
Name of Authorized Agent (Print)	Title	Signature	Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07250

946430104

PATHOGEN REDUCTION METHOD CODE **(Appropriate sections must be completed)**

A. Anaerobic Digestion; or

B. Aerobic Digestion; complete the following:

		UNIT 1	UNIT 2	UNIT 3
1. Percent Volatile Solids:				
a. Before Stabilization	(as weight % of TS)	____	____	____
b. After Stabilization	(as weight % of TS)	____	____	____
c. Percent Reduction	(see equation)	____	____	____
2. Detention Time	(Days)	____	____	____
3. Average Temperature	(Degrees C)	____	____	____

C. Air Drying (Report on any beds emptied for the report period)

BED	DATE SLUDGE LOADED Month	Day	Year	DEPTH POURED Inches	DATE SLUDGE REMOVED Month	Day	Year
1.	__	__	____	__	__	__	____
2.	__	__	____	__	__	__	____
3.	__	__	____	__	__	__	____
4.	__	__	____	__	__	__	____
5.	__	__	____	__	__	__	____

D. State Approved Lime Stabilization
E. Thermal Treatment/Drying
F. Phragmites
G. Composting
H. Other (specify here: _____)
I. None

ULTIMATE SLUDGE MANAGEMENT METHOD CODE

1. Land Application at a NJPDES Permitted Site
2. State Approved Distribution Permit
3. Incineration
4. Ocean Disposal
5. Out of State
6. Residual Not Classified as Sludge, Managed by Hazardous or Waste Flow Regs.
7. Other (specify here: _____)
8. None Removed

EQUATIONS

A. $\text{Dry Tons} = \frac{\text{Gallons (wet) X Solid Content (of the gallons)}}{240}$

B. $\text{Dry Tons} = \frac{\text{Cubic Yards (wet) X Solid Content (of the cubic yards)}}{(Y)}$

y = 1.185 where solid content is less than 15%
= 1.265 where solid content is 16% to 23%
= 1.58 where solid content is 24% to 29%
= 1.9 where solid content is greater than 30%

C. Dry Tons = Tons (wet) X Solid Content (of the wet tons)

D. $\text{Volatile Solids Reduction} = \frac{\text{VS before X VS after}}{\text{VX before— (VS before X VS after)}} \times 100$

NOTE: The total and volatile solid contents in the above equations must be expressed as a decimal, for example:

1% Total Solids = .01
20% Total Solids = .20

Alternative equations may be utilized if approved in writing by NJDEP.

946430105

New Jersey Department of Environmental Protection
Division of Water Resources

METALS AND SELECTED CHEMICAL PARAMETERS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	Yr.	REPORTING CATEGORY	
0 0 2 1 0 1 6	0 9	1 9 9 3	5	2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Filter Press (Wet Air Oxidized) Sludge)

PARAMETERS	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Metals			
Arsenic	01002	136	
Beryllium	01012	025	
Cadmium	61527	3135	
Chromium	61512	6 1970	
Copper	61506	22 9625	
Iron	01045	1 2960	
Lead	61503	5245	
Mercury	01260	274	
Molybdenum	01062	1870	
Nickel	61515	9680	
Selenium	61518	469	*
Zinc	61509	3344	
Selected Chemical Parameters			
Total Nitrogen	00625	9582	
Ammonia	71845	346	
Nitrate Nitrogen	71850	75	
Oil and Grease	00550	1737 42	
Phenols	46000	3836	
Phosphorus	00665	2480 0	
Calcium	00916	1712 5	
Magnesium	00927	4414	
Potassium	00937	792	
Cyanide	00720	462	
Fluoride	00951	104	
Chloride	00940	306	

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli	Chief Chemist		Nov 15, 1993
Name of Authorized Agent (Print)	Title	Signature	Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07407

946430106

T-VWX-009
5/89

New Jersey Department of Environmental Protection
Division of Water Resources

TOXIC ORGANIC COMPOUNDS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	Yr.	REPORTING CATEGORY
0 0 2 1 0 1 6	1 0	1 9 9 3	5 2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Filter Pressed (Wet Air Oxidized) Sludge

PARAMETERS	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Pesticides and PCB's			
Aldrin	39330	0.109	*
Chlordane	39350	1.55	*
Dieldrin	39380	0.124	*
DDT	39370	0.651	*
Heptachlor	39410	0.047	*
Lindane	39782	0.140	*
PCB's	39516	7.75	*
Toxaphene	39400	1.55	*
Purgeables			
Benzene	34030	2.13	*
Carbon tetrachloride	32102	2.13	*
Chloroform	32106	2.13	*
Methylene Chloride	34423	2.13	*
Tetrachloroethylene	34475	2.13	*
Trichloroethylene	39180	2.13	*
Vinyl chloride	39175	4.26	*
Base/Neutrals and Acids			
Benzidine	39120	4.27	*
Benzo(a)pyrene	34247	8.53	*
Bis(2-ethylhexyl) phthalate	39100	151.	
Hexachlorobenzene	39700	8.53	*
Hexachlorobutadiene	39702	8.53	*
N-nitrosodimethylamine	34438	1.71	*

CERTIFICATE OF AUTHENTICITY

Arthur A. Martinelli — Name of Authorized Agent (Print)
Chief Chemist, — Title
Signature
Nov 15, 1993 — Date

Laboratory Name: Priority One Testing Laboratory
Cert No. 09399

946430107

Passaic Valley
Sewerage Commissioners

600 WILSON AVENUE
NEWARK, N.J. 07105
(201) 344-1800
Fax: (201) 344-2951

This domestic wastewater sludge report represents dewatered cake which has been centrifuged and lime stabilized.

946430108

T-VWX-007
5/89

New Jersey Department of Environmental Protection
Division of Water Resources

DOMESTIC WASTEWATER SLUDGE REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY		
0021016	10	1993	5	1	Page 2 of 2

FACILITY NAME: Passaic Valley Sewerage Commissioners

A. REPORTING CATEGORY INFORMATION

1. Permitted Wastewater Flow	(MGD)	A1:	33.00
2. Industrial Conribution	(% of influent)	A2:	18.
3. Average Daily Septage Treated	(Gallons/Day)	A3:	2290

B. INFORMATION ON SLUDGE PRODUCED IN TREATMENT PROCESS

1. Average Total Solids of Sludge	(% by weight)	B1:	4.56
2. Average Daily Sludge Production	(Gallons/Day)	B2:	57697
3. Average Daily Sludge Production	(Dry Tons/Day	B3:	1097.3

**C. INFORMATION ON SLUDGE REMOVED FOR ULTIMATE MANAGEMENT

1. Complete ONLY If Liquid Sludge Is Removed			
a. Total Solids of Liquid Sludge	(% by weight)	C1:	
b. Average Daily Sludge Removal	(Gallons/Day	C2:	
2. Complete ONLY If Dewatered Sludge Is Removed			
a. Total Solids of Dewatered Sludge	(% by weight)	C3:	4.56
b. Complete ONE of the following:			
i. Average Daily Sludge Removal	(Gallons/Day)	C4:	
Total Solids of 2.b.i.	(% by weight)	C5:	
ii. Average Daily Sludge Removal	(Wet Cu. Yds/Day)	C6:	
iii. Average Daily Sludge Removal	(Wet Tons/Day)	C7:	2404
3. Total Average Daily Sludge Removal	(Dry Tons/Day)	C8:	1097.3
4. pH of Sludge Removed	(Standard Units)	C9:	11.2

D. ULTIMATE SLUDGE MANAGEMENT SITE (See Codes on Reverse)

METHOD CODE	HAULER REGISTRY	FACILITY/OPERATION	PERMIT NO.
5	17244	OUT OF STATE	

E. PATHOGEN REDUCTION INFORMATION (See Codes and Complete Reverse)

METHOD CODE	FACILITY/OPERATION	PERMIT NO.	FOR DEP USE ONLY PSRP	FOR DEP USE ONLY PFRP
D	PASSAIC VALLEY	0021016		

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli	Chief Chemist		11/16/93
Name of Authorized Agent (Print)	Title	Signature	Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07250

946430109

PATHOGEN REDUCTION METHOD CODE (Appropriate sections must be completed)

A. Anaerobic Digestion; or

B. Aerobic Digestion; complete the following:

		UNIT 1	UNIT 2	UNIT 3
1. Percent Volatile Solids:				
a. Before Stabilization	(as weight % of TS)	___.__	__.__	__.__
b. After Stabilization	(as weight % of TS)	__.__	__.__	__.__
c. Percent Reduction	(see equation)	__.__	__.__	__.__
2. Detention Time	(Days)	___	___	___
3. Average Temperature	(Degrees C)	__.__	__.__	__.__

C. Air Drying (Report on any beds emptied for the report period)

BED	DATE SLUDGE LOADED Month	Day	Year	DEPTH POURED Inches	DATE SLUDGE REMOVED Month	Day	Year
1.	__	__	____	__	__	__	____
2.	__	__	____	__	__	__	____
3.	__	__	____	__	__	__	____
4.	__	__	____	__	__	__	____
5.	__	__	____	__	__	__	____

D. State Approved Lime Stabilization
E. Thermal Treatment/Drying
F. Phragmites
G. Composting
H. Other (specify here: _____)
I. None

ULTIMATE SLUDGE MANAGEMENT METHOD CODE

1. Land Application at a NJPDES Permitted Site
2. State Approved Distribution Permit
3. Incineration
4. Ocean Disposal
5. Out of State
6. Residual Not Classified as Sludge, Managed by Hazardous or Waste Flow Regs.
7. Other (specify here: _____)
8. None Removed

EQUATIONS

A. $\text{Dry Tons} = \frac{\text{Gallons (wet) X Solid Content (of the gallons)}}{240}$

B. $\text{Dry Tons} = \frac{\text{Cubic Yards (wet) X Solid Content (of the cubic yards)}}{(Y)}$

y = 1.185 where solid content is less than 15%
= 1.265 where solid content is 16% to 23%
= 1.58 where solid content is 24% to 29%
= 1.9 where solid content is greater than 30%

C. Dry Tons = Tons (wet) X Solid Content (of the wet tons)

D. $\text{Volatile Solids Reduction} = \frac{\text{VS before X VS after}}{\text{VX before} - (\text{VS before X VS after})} \times 100$

NOTE: The total and volatile solid contents in the above equations must be expressed as a decimal, for example:

1% Total Solids = .01
20% Total Solids = .20

Alternative equations may be utilized if approved in writing by NJDEP.

946430110

New Jersey Department of Environmental Protection
Division of Water Resources

METALS AND SELECTED CHEMICAL PARAMETERS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	Yr.	REPORTING CATEGORY
0 0 2 1 0 1 6	0 9	1 9 9 3	5 2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Centrifuged (Lime Stabilized) Sludge

PARAMETERS	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Metals			
Arsenic	01002	167	
Beryllium	01012	016	*
Cadmium	61527	1430	
Chromium	61512	14800	
Copper	61506	58405	
Iron	01045	3700	
Lead	61503	1850	
Mercury	01260	070	
Molybdenum	01062	2820	
Nickel	61515	4585	
Selenium	61518	330	
Zinc	61509	9355	
Selected Chemical Parameters			
Total Nitrogen	00625	23049	
Ammonia	71845	391	
Nitrate Nitrogen	71850	252	
Oil and Grease	00550	56416	
Phenols	46000	1007	
Phosphorus	00665	5510	
Calcium	00916	176812	
Magnesium	00927	2804	
Potassium	00937	1084	
Cyanide	00720	1128	
Fluoride	00951	325	
Chloride	00940	4580	

CERTIFICATE OF AUTHENTICITY

Arthur A. Martinelli — Name of Authorized Agent (Print)
Chief Chemist — Title
Signature
Nov 15, 1993 — Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07407

946430111

T-VWX-005
5/89

New Jersey Department of Environmental Protection
Division of Water Resources

TOXIC ORGANIC COMPOUNDS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	Yr.	REPORTING CATEGORY
0 0 2 1 0 1 6	1 0	1 9 9 3	5 2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Centrifuged (Lime Stabilized) Sludge

PARAMETERS	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Pesticides and PCB's			
Aldrin	39330	0.009	*
Chlordane	39350	0.134	*
Dieldrin	39380	0.011	*
DDT	39370	0.056	*
Heptachlor	39410	0.004	*
Lindane	39782	0.012	*
PCB's	39516	0.671	*
Toxaphene	39400	1.34	*
Purgeables			
Benzene	34030	2.72	*
Carbon tetrachloride	32102	2.72	*
Chloroform	32106	2.72	*
Methylene Chloride	34423	2.72	*
Tetrachloroethylene	34475	2.72	*
Trichloroethylene	39180	2.72	*
Vinyl chloride	39175	5.44	*
Base/Neutrals and Acids			
Benzidine	39120	6.75	*
Benzo(a)pyrene	34247	1.35	*
Bis(2-ethylhexyl) phthalate	39100	3.34	
Hexachlorobenzene	39700	1.35	*
Hexachlorobutadiene	39702	1.35	*
N-nitrosodimethylamine	34438	2.70	*

CERTIFICATE OF AUTHENTICITY

Arthur A. Martinelli — Name of Authorized Agent (Print)
Chief Chemist, — Title
 — Signature
Nov. 15, 1993 — Date

Laboratory Name: Priority One Testing Laboratory
Cert No. 09399

946430112

MONITORING REPORT — TRANSMITTAL SHEET

NJPDES NO.	REPORTING PERIOD MO. YR.	REPORTING PERIOD MO. YR.
0 0 2 1 0 1 6	1 1 9 3	THRU 1 1 9 3

PERMITTEE: Name Passaic Valley Sewerage Commissioners

Address 600 Wilson Avenue

Newark, New Jersey 07105

FACILITY: Name Passaic Valley Sewerage Commissioners

Address 600 Wilson Avenue

Newark, N.J. 07105 (County) Essex

Telephone (201) 344-1800

* For reporting period 11/93
** For reporting period 10/93

FORMS ATTACHED *(Indicate Quantity of Each)*

SLUDGE REPORTS - SANITARY

[1]* T-VWX-007 [1]** T-VWX-008 [1]* T-VWX-009

SLUDGE REPORTS - INDUSTRIAL

[ ] T-VWX-010A [ ] T-VWX-010B

WASTEWATER REPORTS

[ ] T-VWX-011 [ ] T-VWX-012 [ ] T-VWX-013

GROUNDWATER REPORTS

[ ] VWX-015(A,B) [ ] VWX-016 [ ] VWX-017

NPDES DISCHARGE MONITORING REPORT

[ ] EPA FORM 3320-1

OPERATING EXCEPTIONS

	YES	NO
DYE TESTING	☐	☐
TEMPORARY BYPASSING	☐	☐
DISINFECTION INTERRUPTION	☐	☐
MONITORING MALFUNCTIONS	☐	☐
UNITS OUT OF OPERATION	☐	☐
OTHER	☐	☐

(Detail any "Yes" on reverse side in appropriate space.)

***NOTE:** The "Hours Attended at Plant" on the reverse of this sheet must also be completed.*

AUTHENTICATION - I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

LICENSED OPERATOR

Name *(Printed)* Phil Habrukowich

Grade & Registry No. NJ S-4 #3972

Signature [signature]

Date 12/23/93

946430113

PRINCIPAL EXECUTIVE OFFICER or DULY AUTHORIZED REPRESENTATIVE

Name *(Printed)* Carmine T. Perrapato

Title *(Printed)* Executive Director

Signature [signature]

Date 12/23/93

Passaic Valley
Sewerage Commissioners

600 WILSON AVENUE
NEWARK, N.J. 07105
(201) 344-1800
Fax: (201) 344-2951
OPERATIONS DEPT. Fax: (201) 817-5709

This domestic wastewater sludge report represents dewatered cake which has been centrifuged and lime stabilized.

946430114

T-WWX-007
5/89

New Jersey Department of Environmental Protection
Division of Water Resources

DOMESTIC WASTEWATER SLUDGE REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY		
0 0 2 1 0 1 6	1 1	1 9 9 3	5	1	Page 2 of 2

FACILITY NAME: Passaic Valley Sewerage Commissioners

A. REPORTING CATEGORY INFORMATION

1. Permitted Wastewater Flow	(MGD)	A1:	330.0
2. Industrial Conribution	(% of influent)	A2:	18
3. Average Daily Septage Treated	(Gallons/Day)	A3:	2377

B. INFORMATION ON SLUDGE PRODUCED IN TREATMENT PROCESS

1. Average Total Solids of Sludge	(% by weight)	B1:	4.59
2. Average Daily Sludge Production	(Gallons/Day)	B2:	70768
3. Average Daily Sludge Production	(Dry Tons/Day	B3:	13.543

**C. INFORMATION ON SLUDGE REMOVED FOR ULTIMATE MANAGEMENT

1. *Complete ONLY If Liquid Sludge Is Removed*			
a. Total Solids of Liquid Sludge	(% by weight)	C1:	
b. Average Daily Sludge Removal	(Gallons/Day	C2:	
2. Complete ONLY If Dewatered Sludge Is Removed			
a. Total Solids of Dewatered Sludge	(% by weight)	C3:	4.59
b. Complete ONE of the following:			
i. Average Daily Sludge Removal	(Gallons/Day)	C4:	
Total Solids of 2.b.i.	(% by weight)	C5:	
ii. Average Daily Sludge Removal	(Wet Cu. Yds/Day)	C6:	
iii. Average Daily Sludge Removal	(Wet Tons/Day)	C7:	29.49
3. Total Average Daily Sludge Removal	(Dry Tons/Day)	C8:	13.543
4. pH of Sludge Removed	(Standard Units)	C9:	11.2

D. ULTIMATE SLUDGE MANAGEMENT SITE (See Codes on Reverse)

METHOD CODE	HAULER REGISTRY	FACILITY/OPERATION	PERMIT NO.
5	17244	OUT OF STATE	

E. PATHOGEN REDUCTION INFORMATION (See Codes and Complete Reverse)

METHOD CODE	FACILITY/OPERATION	PERMIT NO.	FOR DEP USE ONLY PSRP	FOR DEP USE ONLY PFRP
D	PASSAIC VALLEY	0021016		

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli	Chief Chemist		12/9/93
Name of Authorized Agent (Print)	Title	Signature	Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07250

946430115

PATHOGEN REDUCTION METHOD CODE (Appropriate sections must be completed)

A. Anaerobic Digestion; or

B. Aerobic Digestion; complete the following:

		UNIT 1	UNIT 2	UNIT 3
1. Percent Volatile Solids:				
a. Before Stabilization	(as weight % of TS)			
b. After Stabilization	(as weight % of TS)			
c. Percent Reduction	(see equation)			
2. Detention Time	(Days)			
3. Average Temperature	(Degrees C)			

C. Air Drying (Report on any beds emptied for the report period)

BED	DATE SLUDGE LOADED Month	Day	Year	DEPTH POURED Inches	DATE SLUDGE REMOVED Month	Day	Year
1.							
2.							
3.							
4.							
5.							

D. State Approved Lime Stabilization
E. Thermal Treatment/Drying
F. Phragmites
G. Composting
H. Other (specify here: _____)
I. None

ULTIMATE SLUDGE MANAGEMENT METHOD CODE

1. Land Application at a NJPDES Permitted Site
2. State Approved Distribution Permit
3. Incineration
4. Ocean Disposal
5. Out of State
6. Residual Not Classified as Sludge, Managed by Hazardous or Waste Flow Regs.
7. Other (specify here: _____)
8. None Removed

EQUATIONS

A. $\text{Dry Tons} = \frac{\text{Gallons (wet) X Solid Content (of the gallons)}}{240}$

B. $\text{Dry Tons} = \frac{\text{Cubic Yards (wet) X Solid Content (of the cubic yards)}}{(Y)}$

y = 1.185 where solid content is less than 15%
= 1.265 where solid content is 16% to 23%
= 1.58 where solid content is 24% to 29%
= 1.9 where solid content is greater than 30%

C. Dry Tons = Tons (wet) X Solid Content (of the wet tons)

D. $\text{Volatile Solids Reduction} = \frac{\text{VS before X VS after}}{\text{VX before} - (\text{VS before X VS after})} \times 100$

NOTE: The total and volatile solid contents in the above equations must be expressed as a decimal, for example:

1% Total Solids = .01
20% Total Solids = .20

Alternative equations may be utilized if approved in writing by NJDEP.

946430116

METALS AND SELECTED CHEMICAL PARAMETERS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	Yr.	REPORTING CATEGORY	
0 0 2 1 0 1 6	1 0	1 9 9 3	5	2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Centrifuged (Lime Stabilized) Sludge

PARAMETERS	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Metals			
Arsenic	01002	180	*
Beryllium	01012	036	*
Cadmium	61527	1290	
Chromium	61512	11680	
Copper	61506	45665	
Iron	01045	3170	
Lead	61503	16350	
Mercury	01260	100	
Molybdenum	01062	2910	
Nickel	61515	4520	
Selenium	61518	364	*
Zinc	61509	658	
Selected Chemical Parameters			
Total Nitrogen	00625	450000	
Ammonia	71845	671	
Nitrate Nitrogen	71850	247	
Oil and Grease	00550	43860	
Phenols	46000	2829	
Phosphorus	00665	7710	
Calcium	00916	213438	
Magnesium	00927	2920	
Potassium	00937	1195	
Cyanide	00720	1947	
Fluoride	00951	147	
Chloride	00940	107220	

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli — Name of Authorized Agent (Print)
Chief Chemist — Title
Arthur A. Martinelli — Signature
12/9/93 — Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07407

946430117

TOXIC ORGANIC COMPOUNDS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	Yr.	REPORTING CATEGORY
0 0 2 1 0 1 6	1 1	1 9 9 3	5 2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Centrifuged (Lime Stabilized) Sludge

PARAMETERS	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Pesticides and PCB's			
Aldrin	39330	0.007	*
Chlordane	39350	0.107	*
Dieldrin	39380	0.009	*
DDT	39370	0.045	*
Heptachlor	39410	0.003	*
Lindane	39782	0.010	*
PCB's	39516	0.535	*
Toxaphene	39400	1.07	*
Purgeables			
Benzene	34030	2.68	*
Carbon tetrachloride	32102	2.68	*
Chloroform	32106	2.68	*
Methylene Chloride	34423	2.68	*
Tetrachloroethylene	34475	2.68	*
Trichloroethylene	39180	2.68	*
Vinyl chloride	39175	5.35	*
Base/Neutrals and Acids			
Benzidine	39120	9.81	*
Benzo(a)pyrene	34247	1.96	*
Bis(2-ethylhexyl) phthalate	39100	8.18	
Hexachlorobenzene	39700	1.96	*
Hexachlorobutadiene	39702	1.96	*
N-nitrosodimethylamine	34438	3.92	*

CERTIFICATE OF AUTHENTICITY

Arthur A. Martinelli — Name of Authorized Agent (Print)
Chief Chemist — Title
Signature
12/10/93 — Date

Laboratory Name: Priority One Testing Laboratory
Cert No. 09399

946430118

Passaic Valley
Sewerage Commissioners

600 WILSON AVENUE
NEWARK, N.J. 07105
(201) 344-1800
Fax: (201) 344-2951
OPERATIONS DEPT. Fax: (201) 817-5709

This domestic wastewater sludge report represents dewatered cake which originated from our Zimpro process.

946430119

T-VWX-007
5/89

New Jersey Department of Environmental Protection
Division of Water Resources

DOMESTIC WASTEWATER SLUDGE REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY		
0 0 2 1 0 1 6	1 1	1 9 9 3	5	1	Page 1 of 2

FACILITY NAME: Passaic Valley Sewerage Commissioners

A. REPORTING CATEGORY INFORMATION

1. Permitted Wastewater Flow	(MGD)	A1:	330.0
2. Industrial Conribution	(% of influent)	A2:	18.
3. Average Daily Septage Treated	(Gallons/Day)	A3:	2377.

B. INFORMATION ON SLUDGE PRODUCED IN TREATMENT PROCESS

1. Average Total Solids of Sludge	(% by weight)	B1:	5.62
2. Average Daily Sludge Production	(Gallons/Day)	B2:	285160.
3. Average Daily Sludge Production	(Dry Tons/Day	B3:	6672

**C. INFORMATION ON SLUDGE REMOVED FOR ULTIMATE MANAGEMENT

1. Complete ONLY If Liquid Sludge Is Removed			
a. Total Solids of Liquid Sludge	(% by weight)	C1:	
b. Average Daily Sludge Removal	(Gallons/Day	C2:	
2. Complete ONLY If Dewatered Sludge Is Removed			
a. Total Solids of Dewatered Sludge	(% by weight)	C3:	5.62
b. Complete ONE of the following:			
i. Average Daily Sludge Removal	(Gallons/Day)	C4:	
Total Solids of 2.b.i.	(% by weight)	C5:	
ii. Average Daily Sludge Removal	(Wet Cu. Yds/Day)	C6:	
iii. Average Daily Sludge Removal	(Wet Tons/Day)	C7:	1188.
3. Total Average Daily Sludge Removal	(Dry Tons/Day)	C8:	6672
4. pH of Sludge Removed	(Standard Units)	C9:	5.9

D. ULTIMATE SLUDGE MANAGEMENT SITE (See Codes on Reverse)

METHOD CODE	HAULER REGISTRY	FACILITY/OPERATION	PERMIT NO.
5	17244	OUT OF STATE	

E. PATHOGEN REDUCTION INFORMATION (See Codes and Complete Reverse)

METHOD CODE	FACILITY/OPERATION	PERMIT NO.	FOR DEP USE ONLY PSRP	FOR DEP USE ONLY PFRP
E	PASSAIC VALLEY	0021016		

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli	Chief Chemist		12/9/93
Name of Authorized Agent (Print)	Title	Signature	Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07250

946430120

PATHOGEN REDUCTION METHOD CODE **(Appropriate sections must be completed)**

A. Anaerobic Digestion; or

B. Aerobic Digestion; complete the following:

		UNIT 1	UNIT 2	UNIT 3
1. Percent Volatile Solids:				
a. Before Stabilization	(as weight % of TS)	____	____	____
b. After Stabilization	(as weight % of TS)	____	____	____
c. Percent Reduction	(see equation)	____	____	____
2. Detention Time	(Days)	____	____	____
3. Average Temperature	(Degrees C)	____	____	____

C. Air Drying (Report on any beds emptied for the report period)

BED	DATE SLUDGE LOADED Month	Day	Year	DEPTH POURED Inches	DATE SLUDGE REMOVED Month	Day	Year
1.	__	__	____	__	__	__	____
2.	__	__	____	__	__	__	____
3.	__	__	____	__	__	__	____
4.	__	__	____	__	__	__	____
5.	__	__	____	__	__	__	____

D. State Approved Lime Stabilization
E. Thermal Treatment/Drying
F. Phragmites
G. Composting
H. Other (specify here: _____)
I. None

ULTIMATE SLUDGE MANAGEMENT METHOD CODE

1. Land Application at a NJPDES Permitted Site
2. State Approved Distribution Permit
3. Incineration
4. Ocean Disposal
5. Out of State
6. Residual Not Classified as Sludge, Managed by Hazardous or Waste Flow Regs.
7. Other (specify here: _____)
8. None Removed

EQUATIONS

A. Dry Tons = $\frac{\text{Gallons (wet) X Solid Content (of the gallons)}}{240}$

B. Dry Tons = $\frac{\text{Cubic Yards (wet) X Solid Content (of the cubic yards)}}{(Y)}$

y = 1.185 where solid content is less than 15%
= 1.265 where solid content is 16% to 23%
= 1.58 where solid content is 24% to 29%
= 1.9 where solid content is greater than 30%

C. Dry Tons = Tons (wet) X Solid Content (of the wet tons)

D. Volatile Solids Reduction = $\frac{\text{VS before X VS after}}{\text{VX before} - (\text{VS before X VS after})}$ X 100

NOTE: The total and volatile solid contents in the above equations must be expressed as a decimal, for example:

1% Total Solids = .01
20% Total Solids = .20

Alternative equations may be utilized if approved in writing by NJDEP.

946430121

New Jersey Department of Environmental Protection
Division of Water Resources

METALS AND SELECTED CHEMICAL PARAMETERS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	Yr.	REPORTING CATEGORY
0021016	10	1993	52

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: *Filter Press (Wet Air Oxidized) Sludge)*

PARAMETERS	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Metals			
Arsenic	01002	279	
Beryllium	01012	084	*
Cadmium	61527	5755	
Chromium	61512	59020	
Copper	61506	2040	
Iron	01045	16450	
Lead	61503	45100	
Mercury	01260	352	
Molybdenum	01062	2410	
Nickel	61515	8900	
Selenium	61518	830	*
Zinc	61509	2722	
Selected Chemical Parameters			
Total Nitrogen	00625	14291	
Ammonia	71845	737	
Nitrate Nitrogen	71850	371	
Oil and Grease	00550	188581	
Phenols	46000	5227	
Phosphorus	00665	20070	
Calcium	00916	19075	
Magnesium	00927	4789	
Potassium	00937	745	
Cyanide	00720	1081	
Fluoride	00951	112	
Chloride	00940	950	

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli — Name of Authorized Agent (Print)
Chief Chemist — Title
[signature] — Signature
12/9/93 — Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07407

946430122

T-VWX-009
5/89

New Jersey Department of Environmental Protection
Division of Water Resources

TOXIC ORGANIC COMPOUNDS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	Yr.	REPORTING CATEGORY	
0 0 2 1 0 1 6	1 1	1 9 9 3	5	2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Filter Pressed (Wet Air Oxidized) Sludge

PARAMETERS	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Pesticides and PCB's			
Aldrin	39330	0.545	*
Chlordane	39350	7.79	*
Dieldrin	39380	0.623	*
DDT	39370	3.27	*
Heptachlor	39410	0.234	*
Lindane	39782	0.701	*
PCB's	39516	3.89	*
Toxaphene	39400	7.79	*
Purgeables			
Benzene	34030	2.19	*
Carbon tetrachloride	32102	2.19	*
Chloroform	32106	2.19	*
Methylene Chloride	34423	2.19	*
Tetrachloroethylene	34475	2.19	*
Trichloroethylene	39180	2.19	*
Vinyl chloride	39175	4.38	*
Base/Neutrals and Acids			
Benzidine	39120	1.69	*
Benzo(a)pyrene	34247	3.38	*
Bis(2-ethylhexyl) phthalate	39100	2.39	
Hexachlorobenzene	39700	3.38	*
Hexachlorobutadiene	39702	3.38	*
N-nitrosodimethylamine	34438	6.77	*

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli — Name of Authorized Agent (Print)
Chief Chemist, — Title
Signature
12/10/93 — Date

Laboratory Name: Priority One Testing Laboratory
Cert No. 09399

946430123

MONITORING REPORT — TRANSMITTAL SHEET

NJPDES NO.	REPORTING PERIOD MO. YR.		MO. YR.
0 0 2 1 0 1 6	1 2 9 3	THRU	1 2 9 3

PERMITTEE: Name Passaic Valley Sewerage Commissioners

Address 600 Wilson Avenue

Newark, New Jersey 07105

FACILITY: Name Passaic Valley Sewerage Commissioners

Address 600 Wilson Avenue

Newark, N.J. 07105 (County) Essex

Telephone (201) 344-1800

* For reporting period 12/93

FORMS ATTACHED *(Indicate Quantity of Each)*

SLUDGE REPORTS - SANITARY

[1]* T-VWX-007 [ ] T-VWX-008 [1]* T-VWX-009

SLUDGE REPORTS - INDUSTRIAL

[ ] T-VWX-010A [ ] T-VWX-010B

WASTEWATER REPORTS

[ ] T-VWX-011 [ ] T-VWX-012 [ ] T-VWX-013

GROUNDWATER REPORTS

[ ] VWX-015(A,B) [ ] VWX-016 [ ] VWX-017

NPDES DISCHARGE MONITORING REPORT

[ ] EPA FORM 3320-1

OPERATING EXCEPTIONS

	YES	NO
DYE TESTING	☐	☐
TEMPORARY BYPASSING	☐	☐
DISINFECTION INTERRUPTION	☐	☐
MONITORING MALFUNCTIONS	☐	☐
UNITS OUT OF OPERATION	☐	☐
OTHER	☐	☐

(Detail any "Yes" on reverse side in appropriate space.)

***NOTE:** The "Hours Attended at Plant" on the reverse of this sheet must also be completed.*

AUTHENTICATION - I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

LICENSED OPERATOR

Name *(Printed)* Phil Habrukowich

Grade & Registry No. NJ S-4 #3972

Signature [signature]

Date 1/25/94

PRINCIPAL EXECUTIVE OFFICER or DULY AUTHORIZED REPRESENTATIVE

Name *(Printed)* Carmine T. Perrapato

Title *(Printed)* Executive Director

Signature [signature]

Date 1/27/94

946430124

Passaic Valley
Sewerage Commissioners

600 WILSON AVENUE
NEWARK, N.J. 07105
(201) 344-1800
Fax: (201) 344-2951

This domestic wastewater sludge report represents dewatered cake which has been centrifuged and lime stabilized.

946430125

T-VWX-007
5/89

New Jersey Department of Environmental Protection
Division of Water Resources

DOMESTIC WASTEWATER SLUDGE REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	REPORTING PERIOD Yr.	REPORTING CATEGORY		Page
0 0 2 1 0 1 6	1 2	1 9 9 3	5	1	2 of 2

FACILITY NAME: Passaic Valley Sewerage Commissioners

A. REPORTING CATEGORY INFORMATION

1. Permitted Wastewater Flow	(MGD)	A1:	330.0
2. Industrial Conribution	(% of influent)	A2:	18.
3. Average Daily Septage Treated	(Gallons/Day)	A3:	1613

B. INFORMATION ON SLUDGE PRODUCED IN TREATMENT PROCESS

1. Average Total Solids of Sludge	(% by weight)	B1:	4.24
2. Average Daily Sludge Production	(Gallons/Day)	B2:	621119
3. Average Daily Sludge Production	(Dry Tons/Day	B3:	10969

**C. INFORMATION ON SLUDGE REMOVED FOR ULTIMATE MANAGEMENT

1. Complete ONLY If Liquid Sludge Is Removed			
a. Total Solids of Liquid Sludge	(% by weight)	C1:	
b. Average Daily Sludge Removal	(Gallons/Day	C2:	
2. Complete ONLY If Dewatered Sludge Is Removed			
a. Total Solids of Dewatered Sludge	(% by weight)	C3:	4.24
b. Complete ONE of the following:			
i. Average Daily Sludge Removal	(Gallons/Day)	C4:	
Total Solids of 2.b.i.	(% by weight)	C5:	
ii. Average Daily Sludge Removal	(Wet Cu. Yds/Day)	C6:	
iii. Average Daily Sludge Removal	(Wet Tons/Day)	C7:	2538
3. Total Average Daily Sludge Removal	(Dry Tons/Day)	C8:	10969
4. pH of Sludge Removed	(Standard Units)	C9:	11.1

D. ULTIMATE SLUDGE MANAGEMENT SITE (See Codes on Reverse)

METHOD CODE	HAULER REGISTRY	FACILITY/OPERATION	PERMIT NO.
5	17244	OUT OF STATE	

E. PATHOGEN REDUCTION INFORMATION (See Codes and Complete Reverse)

METHOD CODE	FACILITY/OPERATION	PERMIT NO.	FOR DEP USE ONLY PSRP	FOR DEP USE ONLY PFRP
D	PASSAIC VALLEY	0021016		

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli	Chief Chemist		1/12/94
Name of Authorized Agent (Print)	Title	Signature	Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07250

946430126

PATHOGEN REDUCTION METHOD CODE (Appropriate sections must be completed)

A. Anaerobic Digestion; *or*

B. Aerobic Digestion; complete the following:

		UNIT 1	UNIT 2	UNIT 3
1. Percent Volatile Solids:				
a. Before Stabilization	(as weight % of TS)			
b. After Stabilization	(as weight % of TS)			
c. Percent Reduction	(see equation)			
2. Detention Time	(Days)			
3. Average Temperature	(Degrees C)			

C. Air Drying (Report on any beds emptied for the report period)

BED	DATE SLUDGE LOADED Month	Day	Year	DEPTH POURED Inches	DATE SLUDGE REMOVED Month	Day	Year
1.							
2.							
3.							
4.							
5.							

D. State Approved Lime Stabilization
E. Thermal Treatment/Drying
F. Phragmites
G. Composting
H. Other (specify here: _____)
I. None

ULTIMATE SLUDGE MANAGEMENT METHOD CODE

1. Land Application at a NJPDES Permitted Site
2. State Approved Distribution Permit
3. Incineration
4. Ocean Disposal
5. Out of State
6. Residual Not Classified as Sludge, Managed by Hazardous or Waste Flow Regs.
7. Other (specify here: _____)
8. None Removed

EQUATIONS

A. $\text{Dry Tons} = \frac{\text{Gallons (wet) X Solid Content (of the gallons)}}{240}$

B. $\text{Dry Tons} = \frac{\text{Cubic Yards (wet) X Solid Content (of the cubic yards)}}{(Y)}$

y = 1.185 where solid content is less than 15%
= 1.265 where solid content is 16% to 23%
= 1.58 where solid content is 24% to 29%
= 1.9 where solid content is greater than 30%

C. Dry Tons = Tons (wet) X Solid Content (of the wet tons)

D. $\text{Volatile Solids Reduction} = \frac{\text{VS before X VS after}}{\text{VX before} - (\text{VS before X VS after})} \times 100$

NOTE: The total and volatile solid contents in the above equations must be expressed as a decimal, for example:

1% Total Solids = .01
20% Total Solids = .20

Alternative equations may be utilized if approved in writing by NJDEP.

946430127

New Jersey Department of Environmental Protection
Division of Water Resources

TOXIC ORGANIC COMPOUNDS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	Yr.	REPORTING CATEGORY
0 0 2 1 0 1 6	1 2	1 9 9 3	5 2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Centrifuged (Lime Stabilized) Sludge

PARAMETERS	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Pesticides and PCB's			
Aldrin	39330	0.007	*
Chlordane	39350	0.098	*
Dieldrin	39380	0.008	*
DDT	39370	0.041	*
Heptachlor	39410	0.003	*
Lindane	39782	0.009	*
PCB's	39516	0.488	*
Toxaphene	39400	0.976	*
Purgeables			
Benzene	34030	2.90	*
Carbon tetrachloride	32102	2.90	*
Chloroform	32106	2.90	*
Methylene Chloride	34423	2.90	*
Tetrachloroethylene	34475	2.90	*
Trichloroethylene	39180	2.90	*
Vinyl chloride	39175	5.79	*
Base/Neutrals and Acids			
Benzidine	39120	676	*
Benzo(a)pyrene	34247	5.88	*
Bis(2-ethylhexyl) phthalate	39100	101	
Hexachlorobenzene	39700	5.88	*
Hexachlorobutadiene	39702	5.88	*
N-nitrosodimethylamine	34438	1.75	*

CERTIFICATE OF AUTHENTICITY

Arthur A. Martinelli — Name of Authorized Agent (Print)
Chief Chemist, — Title
Signature
1/11/94 — Date

Laboratory Name: Priority One Testing Laboratory
Cert No. 09399

946430128

600 WILSON AVENUE
NEWARK, N.J. 07105
(201) 344-1800
Fax: (201) 344-2951

This domestic wastewater sludge report represents dewatered cake which originated from our Zimpro process.

946430129

T-WWX-007
5/99

New Jersey Department of Environmental Protection
Division of Water Resources

DOMESTIC WASTEWATER SLUDGE REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	Yr.	REPORTING CATEGORY		
0 0 2 1 0 1 6	1 2	1 9 9 3	5	1	Page 1 of 2

FACILITY NAME: Passaic Valley Sewerage Commissioners

A. REPORTING CATEGORY INFORMATION

1. Permitted Wastewater Flow	(MGD)	A1:	330.0
2. Industrial Conribution	(% of influent)	A2:	18.
3. Average Daily Septage Treated	(Gallons/Day)	A3:	1613

B. INFORMATION ON SLUDGE PRODUCED IN TREATMENT PROCESS

1. Average Total Solids of Sludge	(% by weight)	B1:	5.48
2. Average Daily Sludge Production	(Gallons/Day)	B2:	32473.
3. Average Daily Sludge Production	(Dry Tons/Day	B3:	741.7

**C. INFORMATION ON SLUDGE REMOVED FOR ULTIMATE MANAGEMENT

1. Complete ONLY If Liquid Sludge Is Removed			
a. Total Solids of Liquid Sludge	(% by weight)	C1:	.
b. Average Daily Sludge Removal	(Gallons/Day	C2:	,
2. Complete ONLY If Dewatered Sludge Is Removed			
a. Total Solids of Dewatered Sludge	(% by weight)	C3:	5.48
b. Complete ONE of the following:			
i. Average Daily Sludge Removal	(Gallons/Day)	C4:	,
Total Solids of 2.b.i.	(% by weight)	C5:	.
ii. Average Daily Sludge Removal	(Wet Cu. Yds/Day)	C6:	.
iii. Average Daily Sludge Removal	(Wet Tons/Day)	C7:	135.3
3. Total Average Daily Sludge Removal	(Dry Tons/Day)	C8:	741.7
4. pH of Sludge Removed	(Standard Units)	C9:	5.5

D. ULTIMATE SLUDGE MANAGEMENT SITE (See Codes on Reverse)

METHOD CODE	HAULER REGISTRY	FACILITY/OPERATION	PERMIT NO.
5	17244	OUT OF STATE	

E. PATHOGEN REDUCTION INFORMATION (See Codes and Complete Reverse)

METHOD CODE	FACILITY/OPERATION	PERMIT NO.	FOR DEP USE ONLY PSRP	PFRP
E	PASSAIC VALLEY	0021016		

CERTIFICATE OF AUTHENTICITY

Arthur A.Martinelli	Chief Chemist		1/12/94
Name of Authorized Agent (Print)	Title	Signature	Date

Laboratory Name: Passaic Valley Sewerage Commissioners Cert No. 07250

946430130

PATHOGEN REDUCTION METHOD CODE (Appropriate sections must be completed)

A. Anaerobic Digestion; or

B. Aerobic Digestion; complete the following:

		UNIT 1	UNIT 2	UNIT 3
1. Percent Volatile Solids:				
a. Before Stabilization	(as weight % of TS)	__.__	__.__	__.__
b. After Stabilization	(as weight % of TS)	__.__	__.__	__.__
c. Percent Reduction	(see equation)	__.__	__.__	__.__
2. Detention Time	(Days)	____	____	____
3. Average Temperature	(Degrees C)	__.__	__.__	__.__

C. Air Drying (Report on any beds emptied for the report period)

BED	DATE SLUDGE LOADED Month	Day	Year	DEPTH POURED Inches	DATE SLUDGE REMOVED Month	Day	Year
1.	__	__	____	__	__	__	____
2.	__	__	____	__	__	__	____
3.	__	__	____	__	__	__	____
4.	__	__	____	__	__	__	____
5.	__	__	____	__	__	__	____

D. State Approved Lime Stabilization
E. Thermal Treatment/Drying
F. Phragmites
G. Composting
H. Other (specify here: _____)
I. None

ULTIMATE SLUDGE MANAGEMENT METHOD CODE

1. Land Application at a NJPDES Permitted Site
2. State Approved Distribution Permit
3. Incineration
4. Ocean Disposal
5. Out of State
6. Residual Not Classified as Sludge, Managed by Hazardous or Waste Flow Regs.
7. Other (specify here: _____)
8. None Removed

EQUATIONS

A. $\text{Dry Tons} = \dfrac{\text{Gallons (wet) X Solid Content (of the gallons)}}{240}$

B. $\text{Dry Tons} = \dfrac{\text{Cubic Yards (wet) X Solid Content (of the cubic yards)}}{(Y)}$

y = 1.185 where solid content is less than 15%
= 1.265 where solid content is 16% to 23%
= 1.58 where solid content is 24% to 29%
= 1.9 where solid content is greater than 30%

C. Dry Tons = Tons (wet) X Solid Content (of the wet tons)

D. $\text{Volatile Solids Reduction} = \dfrac{\text{VS before X VS after}}{\text{VX before— (VS before X VS after)}} \text{ X } 100$

NOTE: *The total and volatile solid contents in the above equations must be expressed as a decimal, for example:*

1% Total Solids = .01
20% Total Solids = .20

946430131

T-VWX-009
5/89

New Jersey Department of Environmental Protection
Division of Water Resources

TOXIC ORGANIC COMPOUNDS REPORT

DISCHARGE PERMIT NO.	REPORTING PERIOD Mo.	Yr.	REPORTING CATEGORY
0 0 2 1 0 1 6	1 2	1 9 9 3	5 2

FACILITY NAME: Passaic Valley Sewerage Commissioners
SLUDGE SAMPLING LOCATION: Filter Pressed (Wet Air Oxidized) Sludge

PARAMETERS	STORET CODE	TOTAL PHASE (dry weight basis,	NONE DETECTED
Pesticides and PCB's			
Aldrin	39330	0.424	*
Chlordane	39350	6.06	*
Dieldrin	39380	0.485	*
DDT	39370	2.55	*
Heptachlor	39410	0.182	*
Lindane	39782	0.545	*
PCB's	39516	3.03	*
Toxaphene	39400	6.06	*
Purgeables			
Benzene	34030	2.20	*
Carbon tetrachloride	32102	2.20	*
Chloroform	32106	2.20	*
Methylene Chloride	34423	2.20	*
Tetrachloroethylene	34475	2.20	*
Trichloroethylene	39180	2.20	*
Vinyl chloride	39175	4.39	*
Base/Neutrals and Acids			
Benzidine	39120	4.04	*
Benzo(a)pyrene	34247	3.51	*
Bis(2-ethylhexyl) phthalate	39100	1.15	
Hexachlorobenzene	39700	3.51	*
Hexachlorobutadiene	39702	3.51	*
N-nitrosodimethylamine	34438	7.03	*

CERTIFICATE OF AUTHENTICITY

Arthur A. Martinelli — Name of Authorized Agent (Print)
Chief Chemist, — Title
Signature
1/11/94 — Date

Laboratory Name: Priority One Testing Laboratory
Cert No. 09399

946430132